DOCUMENT RESUME

ED 364 342 PS 021 895

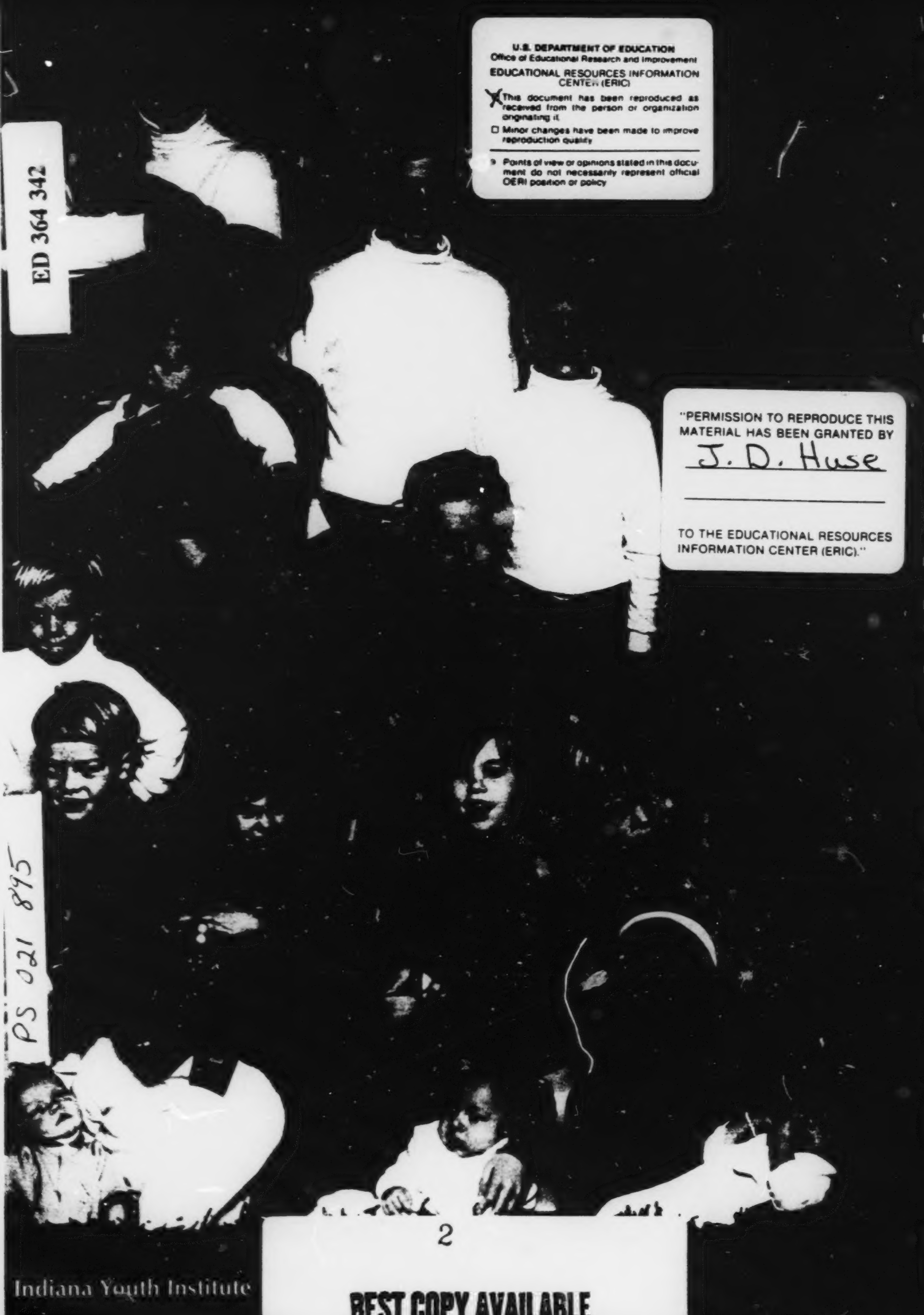
| | |
|---|---|
| AUTHOR | Erickson, Judith B. |
| TITLE | The State of the Child in Indiana, II. |
| INSTITUTION | Indiana Youth Inst., Indianapolis. |
| PUB DATE | 93 |
| NOTE | 354p. |
| AVAILABLE FROM | Indiana Youth Institute, 333 N. Alabama, Suite 200, Indianapolis, IN 46204. |
| PUB TYPE | Reports - Descriptive (141) -- Statistical Data (110) |
| EDRS PRICE | MF01/PC15 Plus Postage. |
| DESCRIPTORS | Adolescents; *At Risk Persons; Behavior Problems; *Child Abuse; *Child Health; Child Neglect; Children; Demography; *Elementary Secondary Education; Injuries; Mortality Rate; Population Trends; *Poverty; Public Schools; Tables (Data); Unemployment; Well Being |
| IDENTIFIERS | *Indiana |

ABSTRACT

This report summarizes information about Indiana's children and the institutions that touch their lives. Chapter 1 examines current demographic trends that relate to Indiana families. Chapter 2 reviews work and income patterns among adults and working teens, and reports on youths' aspirations for future careers. The growing issue of poverty among Indiana families is discussed in chapter 3. Chapter 4 describes the families and institutions that abuse and neglect youngsters in their care. Chapter 5 discusses the child welfare system that is designed to protect Indiana children. The status of Indiana's schools and the educational attainment of Indiana's adults are covered in chapter 6, while chapter 7 contains data about Indiana's schools today and in the past, and a comparison of the Indiana students' test scores with the scores of students in other states. Chapter 8 reviews participation in educational programs designed to assist youngsters with special needs. Chapters 9 and 10 examine the health and well-being of Indiana's children. Chapters 11 and 12 review adolescent sexuality, teen pregnancy, and sexually transmitted diseases; and summarize the findings of several national and Indiana studies on the use of tobacco, alcohol, and other drugs. Chapter 13 addresses topics that relate to children's injuries and deaths, including vehicle accidents and homicides. Three appendices provide a description of the Indiana Step Ahead initiative, definitions of the terms used in the report, and a set of tables containing selected indicators of child and family well-being for each of Indiana's counties. (SM)

***********************************************************************
*    Reproductions supplied by EDRS are the best that can be made    *
*                    from the original document.                     *
***********************************************************************

# The State of the Child in Indiana • II



Indiana Youth Institute

ED 364 342

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
J. D. Huse
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 021 895

BEST COPY AVAILABLE

# Indiana Youth Institute
## Board of Directors

### Officers

President:
H. Lee Cooper, Chairman & CEO
Citizens Bank of Evansville
Evansville, Indiana

Secretary/Treasurer:
Dr. Charlie Nelms, Chancellor
Indiana University East
Richmond, Indiana

Vice President:
Diana Leslie, Partner
Trustee Renewal Project
The Indiana Donors Alliance
Indianapolis, Indiana

### Members

Virginia Ball
Ball Associates
Muncie, Indiana

Becky Buse, Executive Director
Big Brothers/Big Sisters
Terre Haute, Indiana

Jerry Finn, Consultant
Starlight, Indiana

Gary Ingersoll, Executive Associate Dean
Indiana University
School of Education
Bloomington, Indiana

Andrew J. Paine, Jr., President
NBD Indiana, Inc.
Indianapolis, Indiana

Ian Rolland, Chairman & CEO
Lincoln National Corporation
Fort Wayne, Indiana

MarkVolker, Partner
Price Waterhouse, CPAs
Indianapolis, Indiana

Ed Williams, President & CEO
Lakeshore Employment and
Training Partnership
Gary, Indiana

**Special Advisors**

Vera Hamiter
Lawrence Central High School
Indianapolis, Indiana

Heather Schrock
Concord High School
Goshen, Indiana

BEST COPY AVAILABLE

P5

# The State of the Child in Indiana

## II

Judith B. Erickson, Ph.D.
Director, Research Services

**Indiana Youth Institute**
**Indianapolis, Indiana**

The children featured on the front cover of this publication are the friends and family of the staff of the Indiana Youth Institute.

Photo by Richard Swan

The State of the Child in Indiana • II *is published in the public interest by the Indiana Youth Institute, a tax-exempt nonprofit organization. Readers are encouraged to copy and share its contents as long as they include a credit to* The State of the Child in Indiana • II, *Indiana Youth Institute, Indianapolis, Indiana.*

BEST COPY AVAILABLE

## About the Indiana Youth Institute

We believe that the state of Indiana can and should become a state that genuinely cares about its young people and that its national reputation should reflect that concern and commitment.

To enhance that commitment, the Indiana Youth Institute works with adults who care about youth.

- IYI advocates for better service for Indiana's young people, both directly and in collaboration with others.
- IYI develops strategies to increase youth-serving professionals' knowledge, caring, and competence.
- IYI cultivates and supports innovative projects that hold promise for improving the lives of Indiana's young people.

We believe that the key to the success of young people is in the hands of the adults who care about them.

IYI is an intermediary agency that supports youth development professionals and decision makers with advocacy, research, and training.

***Patricia Turner-Smith***
***Executive Director***

*Author:* *Judith B. Erickson*
*Consulting Editor* *Jean B. Rose*
*Designer:* *Judy Reuter*
*Research:* *Dennis Hogan, Kelli Webb*
*Printer:* *Insty-Prints*

# Contents in Brief

**Detailed Contents** .......... *v*

**Introduction** .......... *xi*

**Demographics** .......... 1
Chapter 1: Demographic Trends .......... 7

**Economics** .......... 25
Chapter 2: Work and Income .......... 31
Chapter 3: Poverty .......... 53

**Abuse and Neglect** .......... 75
Chapter 4: Child Abuse and Neglect .......... 83
Chapter 5: Protecting Indiana's Children .......... 107

**Education** .......... 121
Chapter 6: Indiana's Schools .......... 131
Chapter 7: Assessing Hoosier Education .......... 145
Chapter 8: Educating Children With Special Needs .......... 171

**Health and Well-Being** .......... 183
Chapter 9: A Healthy Start in Life .......... 187
Chapter 10: Challenges to Health and Well-Being .......... 203

**High-Risk Behavior** .......... 215
Chapter 11: Adolescent Sexuality .......... 221
Chapter 12: Alcohol, Tobacco, and Other Drugs .......... 237
Chapter 13: Injuries and Deaths .......... 259

**Appendices** .......... 275
Step Ahead .......... 277
Terms Used In This Report .......... 283
County-Level Data .......... 295

BEST COPY AVAILABLE

# Detailed Contents

**Introduction** .......... xi

**Demographics** .......... 1

Chapter 1: Demographic Trends .......... 7
- Population Size and Age Distribution .......... 7
- Diversity .......... 10
- Nativity and Language .......... 12
- Rural/Urban Residence .......... 14
- Hoosier Households and Families .......... 14
  - Ethnic differences in household types .......... 16
- Where Hoosier Children Live .......... 16
- Births .......... 18
- Deaths .......... 18
- Notes .......... 24

**Economics** .......... 25

Chapter 2: Work and Income .......... 31
- Career Aspirations Among High-School Students .......... 32
- Some Economic Realities .......... 33
- Differences in Income Among Ethnic Groups .......... 36
- Geographic Differences in Income .......... 37
- Participation in the Labor Force .......... 37
  - Working men and women .......... 37
  - Working parents .......... 39
- Unemployment .......... 40
- Ethnic Differences in Unemployment .......... 40
- Geographic Variations in Unemployment .......... 41
- Youth in the Labor Force .......... 41
- Youth Employment .......... 42
- Work Certificates .......... 43
- On-the-Job Safety .......... 45
- Restriction of Hours .......... 45
- The Jobs Youths Hold .......... 45
- 1992 Legislation .......... 46

- Present Work and Future Careers ........ 46
- Youth Unemployment ........ 48
- Notes ........ 50

Chapter 3: Poverty ........ 53
- Defining Poverty ........ 54
- Poverty in Indiana ........ 55
- Poverty Among Individual Hoosiers ........ 56
- Poverty Among Hoosier Families ........ 60
- Regional Variations ........ 62
- Indiana's "Safety Net" ........ 62
  - Assistance to Families with Dependent Children (AFDC) ........ 63
  - AFDC recipients ........ 65
- Food Stamps ........ 67
  - Recipients of food stamps ........ 67
  - Free and reduced-price school lunch and breakfast ........ 69
- Growing Use of Safety-Net Programs ........ 70
- Growing Costs of Safety-Net Programs ........ 70
- Hunger in Indiana ........ 71
- Notes ........ 72

**Abuse and Neglect ........ 75**

Chapter 4: Child Abuse and Neglect ........ 83
- Measuring Abuse and Neglect ........ 83
- National Trends ........ 84
- Trends in Indiana ........ 85
  - Reports of abuse and neglect ........ 85
  - Sources of reports ........ 86
- Investigation Outcomes ........ 87
- Patterns of Abuse and Neglect ........ 90
  - Maltreatment and poverty ........ 91
  - Some characteristics of victims and their families ........ 92
  - Perpetrators ........ 93
- Fatalities ........ 95
- Substitute Care ........ 97
  - Foster care in Indiana ........ 98
- Institutional Abuse ........ 100
  - Corporal punishment in Hoosier institutions ........ 101
  - Corporal punishment in Indiana's schools ........ 101
- Notes ........ 103

Chapter 5: Protecting Indiana's Children ........ 107
- An Overloaded System ........ 107
- Marion County Consent Decree ........ 108
- Protecting Indiana's Children: Some Better Ways ........ 110
  - Commission on Abused and Neglected Children ........ 110
  - Home-Based Family-Centered Services ........ 115
  - Healthy Families Indiana ........ 116
  - Additional prevention efforts ........ 116
  - Indiana Child Abuse Risk and Evaluation System (I-CARES) ........ 117
- Improving Services ........ 118
- Notes ........ 118

**Education** .......... 121

Chapter 6: Indiana's Schools .......... 131
  Elementary and Secondary Education .......... 131
    Public schools .......... 131
    Adjusting to population change. .......... 133
  State-operated Schools .......... 134
  Private Schools .......... 134
  Home-schooling in Indiana .......... 135
  The Middle-grades Movement .......... 137
  Educational Attainment .......... 141
  Notes .......... 143
Chapter 7: Assessing Hoosier Education .......... 145
  Indiana's Declining Dropout Rate .......... 145
  Some Characteristics of Dropouts .......... 146
    9th grade dropouts .......... 147
    Some implications .......... 148
    Reasons for dropping out .......... 149
  Dropping Back In .......... 150
  Standardized Testing .......... 151
    International comparisons .......... 151
    State-by-state comparisons .......... 152
    Nationally normed tests .......... 153
    National Assessment of Educational Progress (NAEP) .......... 154
    College entrance examinations .......... 156
    The Armed Forces Qualifying Test (AFQT) .......... 158
    Summary .......... 160
  Workforce Development Issues .......... 160
    Workforce development legislation .......... 161
    The Secretary's Commission on Achieving Necessary Skills (SCANS). .......... 163
  Five Competencies (SCANS) .......... 165
  A Three-Part Foundation (SCANS) .......... 166
  Notes .......... 167
Chapter 8: Educating Children With Special Needs .......... 171
  Head Start .......... 171
    Migrant Head Start Program .......... 172
  Chapter 1 .......... 173
  Special Education Programs .......... 174
  Programs for At-Risk Students .......... 176
  Education for Homeless Children and Youth .......... 179
  Notes .......... 180

**Health and Well-Being** .......... 183

Chapter 9: A Healthy Start in Life .......... 187
  Prenatal Care .......... 187
  Birth Weight .......... 188
    Prematurity vs. slowed fetal growth .......... 188
    Advances in neonatology .......... 188

Factors associated with low birth weight ........ 189
Coordinated care needed ........ 191
Family Wellness Helpline ........ 191
Maternal Mortality ........ 192
Infant Mortality ........ 192
Maternal and Child Health Programs in Indiana ........ 193
Healthy Pregnancy/Healthy Baby Campaign ........ 193
Prenatal Substance Use Prevention Program (PSUPP) ........ 194
Women, Infants and Children Program (WIC) ........ 196
Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT) ........ 197
Notes ........ 200
Chapter 10: Challenges to Health and Well-Being ........ 203
Infectious Diseases ........ 203
Medical technology ........ 203
Public health systems ........ 204
Tuberculosis ........ 206
Childhood Lead Poisoning ........ 206
Access to Health Care ........ 210
Private health insurance ........ 210
Medicaid coverage ........ 210
Notes ........ 213

**High-Risk Behavior ........ 215**

Chapter 11: Adolescent Sexuality ........ 221
Active Sex ........ 221
Adolescent Pregnancy ........ 222
Terminated pregnancies and fetal deaths ........ 222
Teen births ........ 224
Contraceptive Use ........ 224
Sexually Transmitted Diseases ........ 225
National trends ........ 225
Trends in Indiana ........ 225
HIV/AIDS infection ........ 228
Sexuality Education ........ 231
Specific Options Related to Pregnancy and Parenting ........ 232
Specific Options Related to AIDS/HIV Infection and Other Sexually Transmitted Diseases ........ 234
Notes ........ 235
Chapter 12: Alcohol, Tobacco, and Other Drugs ........ 237
Sources of Information ........ 237
Understanding national trends ........ 237
Understanding trends in Indiana ........ 238
Alcohol ........ 238
Alcohol purchase ........ 238
Alcohol consumption ........ 239
Tobacco ........ 243
Cigarettes ........ 243
Smokeless tobacco ........ 246

- Illegal Drugs ........ 248
  - National trends ........ 248
  - Trends in Indiana ........ 250
- Summary of Trends in Indiana ........ 252
  - Alcohol and drug arrests in five Indiana counties ........ 252
  - Drug use by juvenile male arrestees/detainees in Indianapolis ........ 253
- Steroids ........ 254
  - The effects of steroid use ........ 254
- Policy Implications ........ 255
- Notes ........ 257

Chapter 13: Injuries and Deaths ........ 259

- Injuries ........ 259
  - National trends ........ 259
  - Trends in Indiana ........ 260
- Vehicular Accidents ........ 261
  - National trends ........ 261
  - Trends in Indiana ........ 261
  - Some surprising findings about driver education ........ 262
- Seat Belts and Child Safety Seats ........ 264
  - Trends in Indiana ........ 264
- Driving Under the Influence ........ 265
  - National trends ........ 265
  - Trends in Indiana ........ 266
- Youth Suicide ........ 267
  - National trends ........ 267
  - Trends in Indiana ........ 268
- Youth Homicide ........ 270
  - National trends ........ 270
  - Trends in Indiana ........ 270
  - Carrying weapons ........ 271
  - Physical fighting ........ 271
- Summary ........ 271
- Notes ........ 272

**Appendices ........ 275**

Step Ahead ........ 277

Terms Used in this Report ........ 283

County-Level Data ........ 295

10 Blueprints for Healthy Development ........ Inside back cover

# Introduction

> *America's future is forecast in the lives of its children and the ability of their families to raise them. Most American children are healthy, happy, and secure. They belong to warm, loving families. For them, today is filled with the joys of childhood—growing, exploring, learning, and dreaming—and tomorrow is full of hope and promise. These children will become the competent and caring parents, employees, and community leaders upon whom America's future depends.*
>
> *But . . . America's future as a democratic nation, a world leader, and an economic power will depend as much on youngsters who are ill educated, alienated, or poor as on those who are more advantaged. We can no longer afford to be such careless stewards of our children's futures.*
>
> Beyond Rhetoric,
> *Final Report of the National Commission on Children*[1]

Indiana's future, too, is forecast in the lives of its children. How well young Hoosiers are doing depends on many factors. Most are thriving, their lives filled with hope and opportunity. Growing numbers are not thriving. Their lives are too often filled with despair and their prospects limited by poverty, abuse, neglect, or poor health. Children are children but once. How they are nurtured and the experiences of their early years will echo throughout their lives and through the lives of the next generation. Indiana needs all its children, for with each passing decade, there are fewer and fewer of them to step into the family, economic, social, and civic roles vacated by their elders. Indiana must do better. As the *KIDS COUNT Data Book, 1992* declares: "The 1990s offer us a choice—to do nothing and consign our children to rising risk and in so doing be complicit in their eclipsed futures, or to rise to the occasion and reverse these results."[2]

***Children are children but once. The experiences of their early years will echo throughout their lives.***

This report summarizes much of what is known about Indiana's youngest citizens and many of the institutions that touch their lives. It is full of numbers, percentages, rates, and comparisons across time and among groups. There is a risk that these numbers will take on lives of their own and become divorced from the realities of children's lives. While a number can reflect more or less accurately how many Hoosier children live below the poverty line, a number cannot express either the day to day complexities of living on the edge or the meaning of constantly trying to juggle resources that are simply inadequate to cover the most basic expenses of a decent and safe lifestyle.

A number can tell us how many Hoosier babies are born too soon or too small. A number cannot express the anxieties of their parents as they watch these tiny children struggle for life. A number cannot describe the overwhelming responsibility when one of these fragile infants goes home with parents who are still children themselves. A number can summarize how many Hoosier children have been abused and neglected, but it cannot express pain and humiliation and the uncertain dread that it will happen again. A number can tell us how many Hoosier young people have finished high school, but a number cannot describe the efforts of families, teachers, and students themselves who kept these youngsters at their desks, nor can a number express the pride in accomplishment that came with the diploma.

***Numbers by themselves must be viewed with some caution, recognizing their limitations. It is the meaning behind the numbers that must be understood.***

Thus, numbers by themselves must be viewed with some caution, recognizing their limitations. It is the meaning behind the numbers that must be understood. This said, numbers can neither be ignored nor discounted. When carefully and thoroughly collected and reported, numbers can reveal much about the lives and well-being of young Hoosiers. Numbers can show both that action makes a difference and that inaction has consequences. For example, Indiana has invested in its schools and made progress in reducing the numbers of young people dropping out before graduation. Indiana has invested in prenatal and infant care, and the state's infant mortality rate has begun to go down. On the other hand, Indiana has not made the investment needed to create a child protection system that works well for troubled families, despite rising abuse and neglect rates that point to a growing need. Indiana communities have not yet invested sufficiently in neighborhood-based health, social, and recreation services, despite evidence that residents in troubled areas increasingly live in fear and despair.

Public revenues are scarce in Indiana and will continue to be scarce for the foreseeable future. The 1990s will of necessity require informed policy and courageous decision making. There are unlikely to be any easy or cost-free ways to deal with the problems of all children and families. This does not mean, however, that there will not be programs that can make a difference. The value of investments in social, health, and educational programs cannot be gauged only in terms of their impact from one year to the next, but must be measured for their potential longer-term payoffs in the healthy development of the state's most crucial resource—Hoosier children and families.

**Finding the resources to carry out information gathering and reporting has become more difficult.**

## Information in this Report

When the first *The State of the Child in Indiana* report was published in 1988, the authors noted that in many cases data were not available or were of relatively poor quality. At the time *The State of the Child in Indiana, II* was prepared, many of the same problems remained. Several state agencies, in principle, have concurred with a 1990 Legislative Services Agency Evaluation Audit that reported:

> Lack of coordinated planning is further aggravated by the absence of consistent, reliable, and system-wide data on children. This dearth of information seriously compromises the effectiveness of the planning, research, and evaluation processes in programming for delivery of effective services for children. As no central database exists, these efforts lack accurate figures and good statistics for these children. . . . In addition to lack of data, a problem also exists among the differing agencies with sharing data that does exist.[3]

Finding the resources to carry out the information gathering and reporting aspects of their own individual missions has become more difficult, and a coordinated statewide database remains only a hope. Understaffing in statistical divisions of state agencies is a matter of growing concern.

A further obstacle to understanding the status of "whole" children and families is the fragmentary nature of data collection that persists in Indiana. Although individuals and families rarely require services from a single source, departments and agencies have continued to gather information mainly for their own uses.[4] It remains impossible to make linkages among data from reports of the various agencies and the multiple services that they are providing to the same families. Studies done elsewhere demonstrate that poverty or near poverty compromises the healthy development of children and youth in multiple ways. It remains impossible to make a clear assessment of the impact of socioeconomic status on the lives of young Hoosiers.

Finally, some important information is not collected. No state agency is mandated to analyze and report Indiana's divorce statistics, in spite of the fact that obtaining child support from noncustodial parents has become a major issue for many Hoosier families. Another disappointment is the absence of complete statewide statistics on juvenile crime. The fragmentary data that exist suggest increases in the possession and use of weapons by children and teens, in gang membership and activity, and in the victimization of young people by their peers.

*The State of the Child in Indiana, II* study draws on many sources of information about Hoosier children, youth, and families.[5] Four broad themes related to the well-being of Indiana's children, youth, and families run through this report:

- *The need for an improved infrastructure of supports for children, youth and families:* If services are to be effective, they must be available, accessible and affordable for those who need them.
- *The need for valuing the work that youthworkers do*: If youth-serving professionals are to be effective, they must receive improved levels of training and compensation.
- *The need for better information about "whole" children and families:* If the state is to be effective in monitoring the well-being of its young citizens, there must be consistency and links among the data-collection systems used throughout the state.
- *The need to give young people a voice on issues that affect their lives:* If Hoosier youth are to be effective citizens and resources to their communities, they must participate in the decisions that affect their lives.

Each of the six sections in this report discusses an aspect of the lives of young Hoosiers and their families. Each section begins with a one-page summary of highlights covered in the text, followed by a brief discussion of data sources and a review of related questions for which answers could not be found in the existing information. The Sections are as follows:

> *Demographics.* Chapter 1 examines Indiana's current family demographics and some of the longer-term trends that will have major impact on the state's future.
>
> *Economics.* Chapter 2 reviews work and income patterns, both among adults and working teens; it also reports on youths' aspirations for future careers. Chapter 3 discusses the growing issue of poverty among Hoosier families, as well as "safety net" programs available.
>
> *Child abuse and neglect.* Chapter 4 deals with those faltering families and institutions that abuse and neglect youngsters in their care. Chapter 5 looks at the system available to protect Hoosier children, and it reviews the pivotal work and recommendations of the bipartisan Commission on Abused and Neglected Children and their Families.
>
> *Education.* Chapter 6 describes the status of Indiana's schools and the educational attainment of Hoosier adults. Chapter 7 provides comparative information about Indiana's schools today and in years past; it also provides information about how test scores of Hoosier students compare with those of students from other states. Chapter 8 reviews participation in educational programs designed to assist youngsters with special needs.
>
> *Health and well-being.* Chapter 9 examines the start that some young Hoosiers are getting in life, while Chapter 10 looks at some of the challenges to health and well-being, such as obtaining immunizations, being exposed to lead, and gaining access to health-care services.
>
> *High-risk behaviors.* The final section examines some of the behaviors of young people that often compromise their healthy development. Chapter 11 reviews adolescent sexuality, teen pregnancy, and sexually transmitted diseases, including HIV/AIDS; Chapter 12 summarizes the findings of several national and Indiana studies of the use of tobacco, alcohol, and other drugs; and Chapter 13 covers injuries and deaths.

Each of the 13 chapters includes information about both national and Indiana trends and describes some of the educational and social programs available to Hoosiers. The list of programs is a long one, and choices had to be made. No doubt, both program choices and omissions will disappoint some readers.

Three Appendices follow the text. The first provides a description of the Indiana Step Ahead initiative that is referred to many times throughout the text. The second contains definitions of terms as they have been used in this report. Finally, the third presents sets of tables containing selected indicators of child and family well-being for each of Indiana's 92 counties.

## Current Services and Future Reports

The Indiana Youth Institute Resource Center attempts to keep abreast of new and ongoing sources of information related to young people. Current national, state, and county-level statistical information is available.

*The State of the Child in Indiana, II* study will be supplemented by special reports. One of these will explore nonformal education and options for youth development provided by community-based organizations and programs; another report will examine the juvenile justice system in Indiana.

## KIDS COUNT in Indiana

The Indiana Youth Institute received one of 37 state grants from the Annie E. Casey Foundation to produce annual *KIDS COUNT* reports. These reports will update selected indicators of child well-being at the state and county levels. The state reports will supplement the national *KIDS COUNT Data Book*, which has been published annually since 1990. Eventually, all 50 states will have KIDS COUNT projects. These projects will make available for the first time, comparable indicators of child well-being for all counties in the nation's 50 states.

## Acknowledgments

*The State of the Child in Indiana, II* is the work of many people. We are greatly indebted to the statisticians and others in the Indiana state government agencies and not-for-profit organizations that gather and report information about Hoosier children, youth, and their families. They have been unfailingly helpful in supplying information and offering cautions about data quality and interpretation.

We also wish to thank the many individuals who provided critical review of various stages of the draft manuscript. We know that many of the persons named enlisted the help of colleagues; we appreciate their work, as well. Reviewers and their affiliations when they served as readers included: Leah Austin, Family, School, and Community Partnerships for Education; Amos Brown, WTLC Radio; Evan Davis, *Ft. Wayne Journal-Gazette*; Carlyn Johnson and Robert Lehnen, Indiana Education Policy Center, I.U.P.U.I; Carol Rogers, Indiana Business Research Center, Indiana University; Howard Mehlinger, Center for Excellence in Education, Indiana University, Bloomington; Marcella Taylor and Paul Ash, Indiana Department of Education; June Cargile, Indiana Youth Institute; Jeff Iacobazzi and Ron Wintrode, Indiana Department of Workforce Development; Frank Nye, Indiana Department of Transportation; Deborah Wolf and Sandi Sleppy, Indiana Family and Social Services Administration; Vince Failla, United Way of Central Indiana/Community Service Council; Barbara Bishop, Project I-STAR; William J. Bailey, Indiana Prevention Resource Center; Margo Blair, Planned Parenthood; Maureen McLean, Keith Main, Susan Dorrell, and Cynthia Grandia, Indiana State Department of Health; Peggy Eagan and Elizabeth Last, Indiana Chapter for the Prevention of Child Abuse. Readers from the Indiana Youth Institute staff include: Patricia Turner-Smith, Sharon Gunason, Doreen Smith, Dennis Hogan, Kelli Webb, and Michael Drexler. All of our efforts have been substantially enhanced by the editorial work of Jean B. Rose.

## Notes

1. National Commission on Children, *Beyond Rhetoric: A New American Agenda for Children and Families* (Washington, DC: U.S. Government Printing Office, 1991), pp. 3, 11.

2. The Annie E. Casey Foundation and the Center for the Study of Social Policy, *1992 KIDS COUNT Data Book: State Profiles of Child Well-Being* (Washington, DC: Center for the Study of Social Policy, 1992), p. 7.

3. Indiana Legislative Services Agency, *Children with Special Needs: Evaluation Audit* (Indianapolis: Indiana Legislative Services Agency, June 1990), p. 75.

4. In fairness, it must be recognized that many of the reporting procedures

follow legislative mandates or the requirements of federal agencies that provide operating funds for programs administered at the state level. The Family and Social Services Administration (formerly the Indiana Department of Public Welfare) has taken a major step toward coordination through the introduction of a common intake form for the programs that it manages.

5. When Indiana's state government was reorganized in 1992, a number of agencies were renamed. The Indiana Department of Public Welfare became the Indiana Family and Social Services Administration; the Indiana State Board of Health became the Indiana State Department of Health; the Department of Employment and Training, the Commission on Vocational and Technical Training, and the Indiana Department of Workforce Literacy merged to become the Department of Workforce Development. In this report, both old and new designations are used. In general, the name used is the one in force at the time that the data under discussion or in a particular table were produced.

# Demographics

## Blueprints for Healthy Development

What does it take to raise a child? Each of the parts of this report offers a part of the answer with one of IYI's *10 Blueprints for Healthy Development*. IYI's blueprints for healthy development are based on the premise that every child in Indiana—regardless of race, gender, ethnicity, disability, geographical location, or economic status—deserves an equal opportunity to grow up in a safe, healthy, and nurturing environment.

Indiana Youth Institute

The complete text of the *10 Blueprints* appears on the inside back cover of this report.

*Population in Indiana has grown only slightly since 1980. The rate of growth in Indiana was one-tenth that of the nation as a whole. The number of Hoosiers younger than 18* declined *by 10% between 1980 and 1990.*

BEST COPY AVAILABLE

# Highlights

*For the first time, families of color were living in all 92 counties in Indiana in 1990. These families were concentrated in the state's five largest counties: Allen, Lake, Marion, St. Joseph, and Vanderburgh.*

*Fewer than three in four Hoosiers younger than 18 lived in families headed by married couples in 1990. In contrast, nine out of ten young Hoosiers lived in families headed by married couples in 1960.*

*The number of single-parent Hoosier households continues to grow. Households headed by single-parent females outnumber those headed by single-parent males by four to one.*

*More than nine in ten Hoosiers are white (90.6%). African-Americans are the next largest group (7.8%), followed by Asian-Americans (0.7%) and Native Americans (0.2%). Hispanics/Latinos, who may be of any race, represent 1.8% of Indiana's population.*

# Demographics Introduction

Populations change in many ways and at varying rates. Three fundamental processes influence the directions of a state's population change:

- Fertility, or the number of births.
- Mortality, or the number of deaths.
- Migration, the numbers of people moving in or out.

The size of a birth cohort, for example, has profound effects for several decades as the members move through the schools and into the workforce and other adult roles. The best-known cohort is that of the "baby boomers" born between the mid 1940s and 1960s. Although now in their most productive years, this group is aging into retirement and is expected to create serious pressures on such systems as Social Security and health care. The children of today will be called upon to respond to these challenges.

Families are changing, too. In spite of attempts to curb teen pregnancy, unmarried women younger than 20 represent a rising proportion of first-time mothers. Out-of-wedlock births and continuing high rates of separation and divorce have meant that increasing numbers of children are spending at least part of their growing-up years in homes where only one parent is present. Family size is shrinking; one- and two-child families have become the norm. The economic realities of aging mean that many of today's family households often include three generations. All these factors influence the way children define their worlds.

In spite of a relatively high birth rate, economic factors have prompted many young adults and families to move out of Indiana, leaving the state's population nearly stable in size for the past decade. Although Indiana is becoming more diverse, Hoosiers remain fairly homogeneous ethnically and culturally. Recent demographic trends in Indiana differ from those of the nation as a whole. Furthermore, demographic trends vary widely from one county to another within Indiana. Some of the impact and implications of these trends is discussed in the chapter that follows.

## Information Sources

The primary source of demographic information used in this report is the U.S. Bureau of the Census. Every ten years, the nation gears up for a mammoth effort to take account of itself. The resulting population data become the base for congressional apportionment, appropriations from the federal government, and baseline information from which to assess the myriad forms of change to which the nation and states are subject.

Nationally, the census of 1990 came in for a great deal of criticism. It is generally agreed that the census undercounted the poor, particularly those with no permanent address or those who move frequently. In Indiana, this problem was not confined to urban areas; distribution of census questionnaires in rural areas turned out to be a significant challenge.

Other problems cropped up in the last census. Even so seemingly straightforward a category as age is surrounded with problems. For example, the numbers of children under one year of age reported to the census differed markedly from the number of births during the year preceding the census. These children were not "lost," however. Their parents felt uncomfortable in recording their ages as "0" and marked them off as age "1." Furthermore, there are some consistent patterns in intentional misrepresentation of age. Individuals between the ages of 21 and 70 generally report their ages accurately. Persons under 21 and over 70, however, both tend to exaggerate upward.

Definitions used to gather information about race and ethnicity also raise issues of accuracy. The census bureau once relied on the observations of enumerators, but, since moving to mailed questionnaires, the bureau has asked respondents to self-identify racial and ethnic origins. This identification has proved to be confusing for some respondents. Still, the census data provide the best information available about the state's demographic characteristics.

A continuing issue with census information is that it quickly becomes dated. The Indiana Business Research Center (IBRC) compensates by publishing population projections for years between censuses. These projections are approved by the U.S. Bureau of the Census and have proved to be accurate and useful. The Bureau of the Census also conducts annual Current Population Surveys (CPS) among a sample of about 60,000 American households. The CPS was intended originally to provide national data only, but now reports information for individual states. Estimates for the state of Indiana are based on a sample of fewer than 500 households. This sample does not provide information that can be projected accurately to describe the state as a whole.

Some demographic data are not collected in Indiana. For example, although divorce rates are widely believed to be rising and having increased impact on Hoosier children, no way to measure this change has been devised because no state agency is mandated to collect such information. Indiana is one of two states that does not gather divorce data.

## Challenges:

- Increasing the accuracy of data collection, including gaining better information about transient and homeless groups, as well as about individuals and families unlikely to complete the census forms.
- Gathering information on such variables as age and place of residence in ways that permit reaggregation of census data with maximum geographic flexibility.
- Helping all state agencies to see the value of using population projections for establishing rates during the intercensus periods.
- Gathering data on divorce within the state of Indiana.

Chapter 1

# Demographic Trends

This opening chapter examines the characteristics of Indiana's population. How many Hoosiers are there? What are their ages? How many children are born each year? How many die? What are families like? Are more people moving in or out of Indiana? The answers to such questions will determine present and future opportunities for the healthy development of Indiana's youngest citizens and, ultimately, the well-being of all Indiana.

***When major economic change and recession came to Indiana in the early 1980s, many of the "baby boomers" left the state.***

## Population Size and Age Distribution

The 1990 census revealed a Hoosier population of 5,544,159—about the same number living in Indiana in 1980. Indiana's population grew at a rate of just under one percent, while the United States population grew nearly 10% during the decade between censuses. Relative stability in population growth was also characteristic of the states bordering Indiana (Table 1.1). Between 1990 and the year 2000, Indiana is expected to grow by about 5%, a rate still behind the 8% growth rate projected for the nation, but slightly ahead of the rates for neighboring states.[1]

There have been variations in Indiana's population other than size, however. When major economic change and recession came to the state in the early 1980s, many of the "baby boomers" (individuals born between 1946 and 1964) left Indiana. By 1990, "boomers" were still in the prime child-bearing period, between 25 and 44 years of age. "Boomers" represented

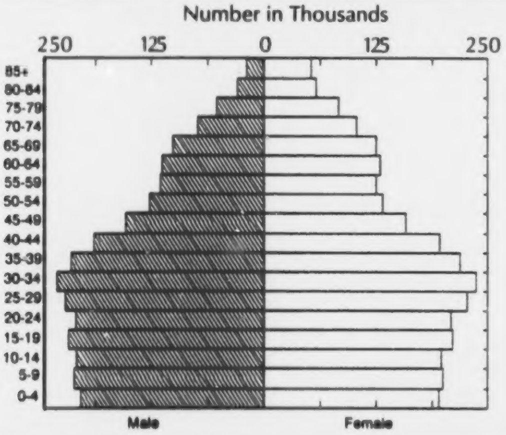
**Table 1.1 Population of the United States, Indiana and Neighboring States, 1990**

| | Population in 1990 | % Change, 1980-1990 |
|---|---|---|
| United States | 248,709,873 | 9.80 |
| **Indiana** | **5,544,159** | **.98** |
| Illinois | 11,430,602 | .04 |
| Kentucky | 3,685,296 | .67 |
| Michigan | 9,295,297 | .36 |
| Ohio | 10,847,115 | .45 |

Source: *Indiana Fact Book, 1992.*

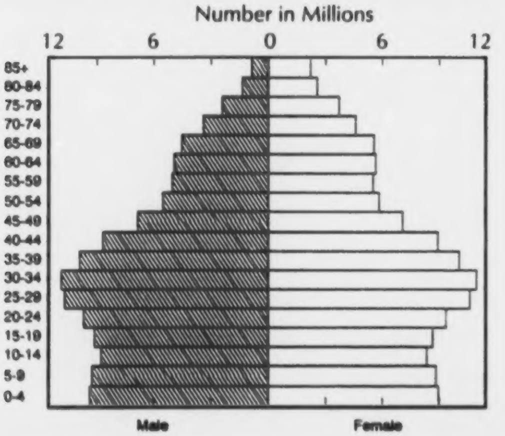
almost 33% of the nation's population in 1990, but only 31% of Indiana's population (down from 35% ten years earlier, when the cohort was between the ages of 15 and 34). The loss of many people in this age group has meant that Indiana has not experienced the "baby boomlet" or "boomer echo" that has occurred elsewhere in the nation. Figures 1.1 and 1.2 use five-year age cohorts to compare the 1990 population profiles of Indiana and the United States.

**Figure 1.1 Indiana's Population by Age and Sex, 1990 Census**



*Source*: Population Studies Division, Indiana Business Research Center, Indiana University.

**Figure 1.2 United States Population by Age and Sex, 1990 Census**

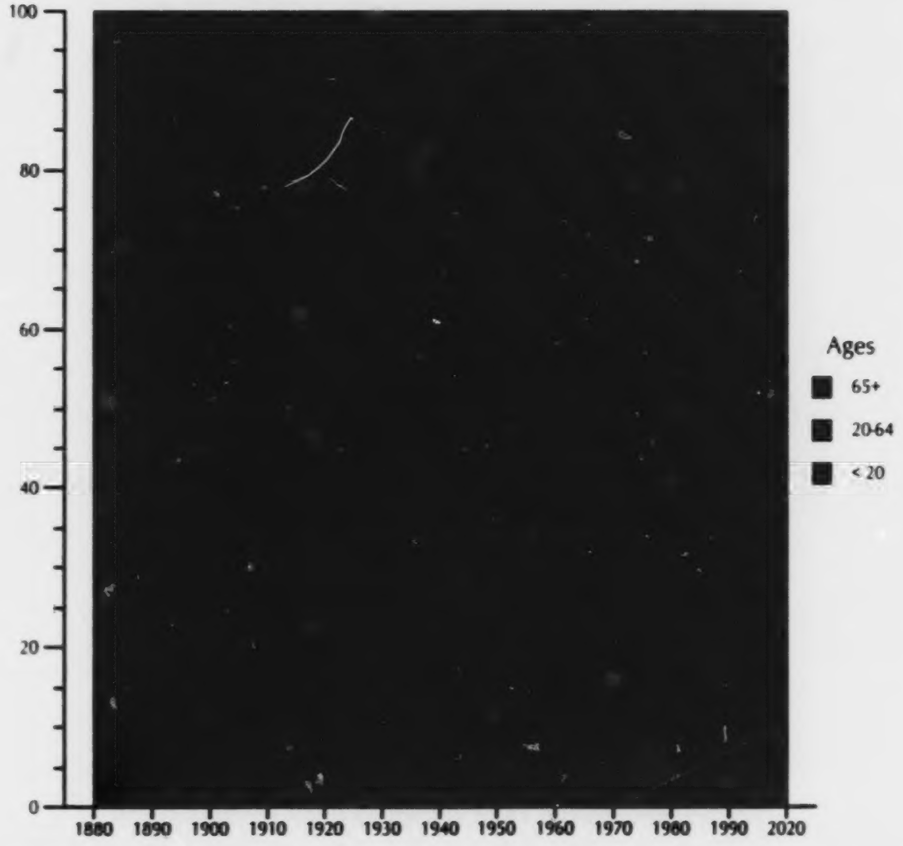


*Source*: Population Studies Division, Indiana Business Research Center, Indiana University.

The marked "greying" trend among Hoosiers is reflected in Indiana's rising median age. The state has been consistently slightly younger than the nation as a whole, but the gap in median age is closing. The median age for Hoosiers was 32.8 years in 1990, and for the U.S. population as a whole, 32.9 years (up from 29.2 years and 30.0 years, respectively, in 1980). The loss of the boomer cohort, coupled with increases in life expectancy, has given persons ages 65 and older a larger share of the state's population than ever before. Persons age 65 and older were 13% of Indiana's population in 1990, up from 11% in 1980. The long term shifts in the proportions of the state's population under age 20 or 65 years and older are traced in Figure 1.3.

***A larger share of Indiana's population than ever before is age 65 and older.***

**Figure 1.3 Indiana Population <20 and 65+ as Proportion of Total Population 1880-1990 and Projected for 2020**



*Source:* Indiana State Data Center, U.S. Census reports.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

The number of Hoosier children under age 18 actually declined by 10% between 1980 and 1990. There were 1,455,964 Hoosiers under the age of 18 in 1990, down from 1,618,311 in 1980. Further decline in this age group is expected in Indiana by the year 2000. Young people under age 18 constituted 26% of the state's population in 1990, down from nearly 30% in 1980. Persons under age 18 constituted 26% of the entire U.S. population in 1990, down from 28% in 1980.

## Diversity

Indiana is a relatively homogeneous state racially and culturally. The U.S. Census Bureau asks Americans to identify themselves in five racial groups: White; Black; Asian or Pacific Islander; American Indian, Eskimo or Aleut; and "Other." The Census Bureau counts Hispanics* separately, since they may be of any race. Thus the figures describing the racial distribution of Indiana's population in Table 1.2a include persons of Hispanic origin. Table 1.2b provides information about Hoosiers who identify themselves as Hispanic

***Although Indiana's population is more than 90% white, other racial and ethnic groups live throughout the state. Variances in age distribution among these groups result from differences in birthrates, life expectancy, and selective migration patterns.***

More than nine in ten Hoosiers are white. African-Americans are the next largest group, representing 7.8% of the state's total population, followed by Asian-Americans (.7%) and Native Americans (.2%). The rest of the population (.7%) identify themselves as belonging to other races. Hispanics/Latinos represent 1.8% of Indiana's population. The various racial/ethnic groups vary in age distribution, reflecting differences in birthrates, life expectancy, and selective migration patterns. Fewer than one-fourth of Whites (21%), Asians (22%), and Native Americans (24%) are under the age of 15; however, this age group represents more than one-fourth of the populations of African-Americans (28%), Hispanics/Latinos (31%) and those of other races (33%). The relatively large proportion of Asians (12%) in the 20-24 age group reflects the fact that many are temporary residents or students in Indiana's institutions of higher education.[2]

*For centuries, American racial and ethnic groups had no say in the labels by which they were identified. As they find their own voices, these groups are seeking self-identification. At this time, although there is not complete consensus within groups, preferences have emerged. In this report, we shall designate groups as African-American, Asian-American, Native American, White, Hispanic/Latino, and Other. The census data do not reveal race/ethnic origins for the last group beyond their self-identification of "Other." Some studies have found that individuals of mixed race or who are Hispanic/Latino tend to use this self-designation.

**Table 1.2a Age Distribution of Indiana Population by Race, 1990**

| Age | All Races (%) | White (%) | African-American (%) | Asian-American (%) | Native American (%) | Other (%) |
|---|---|---|---|---|---|---|
| Under age 1 | 1.3 | 1.2 | 1.6 | 1.2 | 1.3 | 2.1 |
| 1 - 4 | 5.9 | 5.7 | 7.6 | 6.4 | 5.5 | 9.1 |
| 5 - 9 | 7.4 | 7.2 | 9.2 | 7.3 | 8.2 | 11.1 |
| 10 - 14 | 7.3 | 7.1 | 9.3 | 7.3 | 8.7 | 10.9 |
| 15 - 17 | 4.3 | 4.2 | 5.6 | 4.9 | 5.1 | 6.4 |
| 18 - 19 | 3.4 | 3.3 | 3.9 | 4.7 | 3.6 | 4.7 |
| 20 - 24 | 7.5 | 7.5 | 7.8 | 11.9 | 8.2 | 9.9 |
| 25 - 64 | 50.3 | 50.7 | 46.2 | 53.3 | 52.7 | 42.8 |
| 65+ | 12.6 | 13.0 | 8.8 | 3.0 | 6.7 | 3.1 |
| **Total %** | **100.0** | **99.9** | **100.0** | **100.0** | **100.0** | **100.1** |
| Number | 5,544,159 | 5,020,700 | 432,090 | 36,617 | 12,720 | 41,030 |
| As % of total Indiana population | 100.0 | 90.6 | 7.8 | 0.7 | 0.2 | 0.7 |

*Note:* Columns may not total 100% because of rounding.

Source: U.S. Bureau of the Census.

Although the census revealed that there were fewer young people from racial and ethnic minority groups in Indiana in 1990 than in 1980, their numbers did not decline as rapidly (by 3%) as those of white youths (by 11%). A consequence of this difference in rates of change has been that minority youths constituted a greater proportion of all Hoosiers under the age of 18 in 1990 (13%) than they did in 1980 (12%). The nation as a whole experienced an 18% increase in the proportion of the minority population under age 18, from 26% in 1980 to 31% in 1990. Tables 1.3 and 1.4 show population changes for the United States, Indiana, and the four neighboring states. The proportion of minority youth in Indiana is projected to grow to 17% by the year 2000, and to 19% by 2010.[3] These figures are well below the increases in proportions projected for the U.S., 34% and 38% respectively, in 2000 and 2010.

***Minority youths constituted a greater proportion of all Hoosiers under the age of 18 in 1990 than they did in 1980. This population is projected to grow during the next 20 years.***

**Table 1.2b Age Distribution of Indiana Hispanic/Latino Population, 1990**

| Age | Hispanic/Latino (%) |
|---|---|
| Under age 1 | 1.9 |
| 1 - 4 | 8.4 |
| 5 - 9 | 10.5 |
| 10 - 14 | 10.3 |
| 15 - 17 | 6.0 |
| 18 - 19 | 4.4 |
| 20 - 24 | 9.2 |
| 25 - 64 | 44.1 |
| 65 + | 5.3 |
| **Total %** | **100.1** |
| Number | 98,788 |
| As % of total Indiana population | 1.8 |

*Note:* Columns may not total 100% because of rounding.

*Source:* U.S. Bureau of the Census.

The 1990 census found that for the first time in Indiana's history families of color (i.e., persons self-identified as Hispanics/Latinos or from race/ethnic groups other than white) were living in all of the state's 92 counties. However, these populations are geographically concentrated in the five largest counties: Allen (Fort Wayne); Lake (Gary-Hammond-East Chicago); Marion (Indianapolis); St. Joseph (South Bend); and Vanderburgh (Evansville). More than eight in ten African-American and nearly two in three Hispanic/Latino Hoosiers under age 18 live in these counties. Only three in ten white young people in this age group live in these counties (Table 1.5).

## Nativity and Language

Nearly three-fourths of Indiana's resident population in 1990 were born within the state. This proportion is well above the 67% of the population of the nation still living in their states of birth, but slightly below the proportions in the neighboring states of Illinois, Kentucky, Michigan, and Ohio. On the other hand, all of these states but Kentucky have higher proportions of foreign-born residents than does Indiana (Table 1.6).

**Table 1.3 Changes in Total Population Under Age 18, 1980-1990, United States, Indiana and Neighboring States**

| | United States | Indiana | Illinois | Kentucky | Michigan | Ohio |
|---|---|---|---|---|---|---|
| Total population under 18 | | | | | | |
| 1980 | 63,754,960 | **1,618,318** | 3,243,037 | 1,082,730 | 2,751,986 | 3,094,320 |
| 1990 | 63,604,432 | **1,455,964** | 2,946,366 | 954,094 | 2,458,765 | 2,799,744 |
| % change 1980-1990 | - 0.2 | **-10.0** | - 9.1 | -11.9 | -10.7 | - 9.5 |
| Children under 18 as a % of total population | | | | | | |
| 1980 | 28.1 | **29.5** | 28.4 | 29.6 | 29.7 | 28.7 |
| 1990 | 25.6 | **26.3** | 25.8 | 25.9 | 26.5 | 25.8 |

*Source: KIDS COUNT Data Book, 1992.*

**Table 1.4 Changes in Minority Population Under Age 18, 1980-1990, United States, Indiana and Neighboring States**

| | United States | Indiana | Illinois | Kentucky | Michigan | Ohio |
|---|---|---|---|---|---|---|
| Total minority population under 18* | | | | | | |
| 1980 | 16,719,434 | **200,421** | 938,703 | 101,468 | 547,437 | 441,695 |
| 1990 | 19,797,121 | **194,193** | 963,846 | 96,935 | 547,985 | 453,592 |
| % change 1980-1990 | 18.4 | **- 3.1** | 2.7 | - 4.5 | 0.1 | 2.7 |
| Minority children under 18 as % of all children under 18 | | | | | | |
| 1980 | 26.2 | **12.4** | 28.9 | 9.4 | 19.9 | 14.3 |
| 1990 | 31.1 | **13.3** | 32.7 | 10.2 | 22.3 | 16.2 |

*Source: KIDS COUNT Data Book, 1992.*

**Note:* Includes unduplicated count of youth under age 18 who are African-American, Hispanic/Latino, Asian-American, Native American and/or of other races.

**Table 1.5 Indiana Population Under Age 18 by Ethnicity in Indiana's Five Largest Counties, 1990**

| County | All Indiana Youths (%) | African-American (%) | Hispanic/ Latino (%) | White (%) |
|---|---|---|---|---|
| Allen | 5.7 | 8.2 | 6.2 | 5.4 |
| Lake | 9.1 | 27.6 | 45.1 | 6.6 |
| Marion | 14.0 | 38.3 | 7.9 | 11.3 |
| St. Joseph | 4.3 | 6.1 | 5.6 | 4.0 |
| Vanderburgh | 2.7 | 2.9 | 0.8 | 2.7 |
| **Total in 5 counties** | **35.8** | **83.1** | **65.6** | **30.0** |
| Total in state (number) | 1,455,964 | 143,785 | 36,618 | 1,282,062 |

*Source*: U.S. Bureau of the Census.

The proportion of foreign born directly influenced the reports of the language spoken in the home by persons over age five in these five states. Only Illinois had a smaller proportion of English speakers than did the nation as a whole. English is the language of the home for 95% of Indiana's residents, and only about 2% reported that they did not speak English "very well." Of the five states, Kentucky was most homogeneous (Table 1.7).

**Table 1.6 Nativity and Place of Birth, 1990, United States, Indiana and Neighboring States**

| | Born in State of Residence (%) | Foreign-Born (%) | Foreign-Born, Entered U.S. 1980-1990 (%) |
|---|---|---|---|
| United States | 67.1 | 7.9 | 3.5 |
| **Indiana** | **72.3** | **1.7** | **0.6** |
| Illinois | 75.4 | 9.1 | 3.5 |
| Kentucky | 78.1 | 0.9 | 0.4 |
| Michigan | 77.8 | 4.0 | 1.0 |
| Ohio | 75.9 | 2.5 | 0.7 |

*Source*: U.S. Bureau of the Census.

**Table 1.7 Language Spoken at Home by Persons Age 5 and over; United States, Indiana and Neighboring States**

| | English Spoken at Home (%) | Other Language Spoken at Home (%) | Who Do Not Speak English "Very Well" (%) |
|---|---|---|---|
| United States | 86.2 | 13.8 | 6.1 |
| **Indiana** | **95.2** | **4.8** | **1.7** |
| Illinois | 85.8 | 14.2 | 6.2 |
| Kentucky | 97.5 | 2.5 | 0.9 |
| Michigan | 93.4 | 6.6 | 2.2 |
| Ohio | 94.6 | 5.4 | 1.9 |

*Source*: U.S. Bureau of the Census, 1990.

## Rural/Urban Residence

Although family farming has declined in Indiana to the point that only 3% of the state's residents are classified by the census as "farm population," more than a third of the population (35%) still lives in rural areas (Table 1.8). The rural/urban proportions vary greatly from county to county. Marion County is considered 100% urban, followed by Lake County with 95.4% urban, St. Joseph (86.7%), Vanderburgh (85.4%), and Allen (82.7%). Benton, Brown, Crawford, LaGrange, Newton, Ohio, Pike, Pulaski, Spencer, Switzerland, Union, and Warren Counties are 100% rural. The rest of Indiana's counties fall all along the spectrum in between.

## Hoosier Households and Families

As used in the U.S. Census, a "household" includes all persons who occupy a given living unit. Nationally, the number of households has increased, largely through the growth in the numbers of individuals who live alone. Among family households (i.e., households comprised of related individuals), there have been increases in both married couples without children and in households headed by a single parent with children. Although Indiana's population remained essentially stable between 1980 and 1990 (rising less than 1%), the number of Hoosier households increased by 7% during the same decade. The changes are even more marked for the two decades between the 1970 and 1990 censuses. Population increased by only 7%, but the number of households increased by 28% (Table 1.9).

Indiana followed national trends. Nonfamily households, particularly householders living alone, grew markedly between 1970 and 1990, as did single-parent households. Numerically, Indiana has more than four times as many households headed by a single-parent female than house-

**Table 1.8 Urban and Rural Residence, 1990; United States, Indiana and Neighboring States**

| | Urban (%) | Rural (%) |
|---|---|---|
| United States | 75.2 | 24.8 |
| **Indiana** | **64.9** | **35.1** |
| Illinois | 84.6 | 15.4 |
| Kentucky | 51.8 | 48.2 |
| Michigan | 70.5 | 29.5 |
| Ohio | 74.1 | 25.9 |

*Source*: U.S. Bureau of the Census.

**Table 1.9 Indiana Households by Type and Presence of Own Children, 1970-1990.**

| | 1970 | | 1980 | | 1990 | | % Change |
|---|---|---|---|---|---|---|---|
| **Household Type** | **No.** | **%** | **No.** | **%** | **No.** | **%** | **1970-1990** |
| Total households | 1,609,494 | 99.9 | 1,928,375 | 100.0 | 2,065,355 | 100.0 | 28.3 |
| Married couple | | | | | | | |
| with children | 669,411 | 41.6 | 650,754 | 33.7 | 586,033 | 28.4 | - 12.5 |
| without children | 504,152 | 31.3 | 595,608 | 30.9 | 615,987 | 29.8 | 22.2 |
| Male head, no spouse present | | | | | | | |
| with children | 9,846 | 0.6 | 17,566 | 0.9 | 33,658 | 1.6 | 242.4 |
| without children | 19,728 | 1.2 | 22,608 | 1.2 | 27,045 | 1.3 | 37.1 |
| Female head, no spouse present | | | | | | | |
| with children | 63,549 | 3.9 | 111,290 | 5.8 | 146,179 | 7.1 | 130.0 |
| without children | 51,334 | 3.2 | 63,819 | 3.3 | 71,449 | 3.5 | 39.2 |
| Nonfamily households | 291,474 | 18.1 | 466,730 | 24.2 | 585,004 | 28.3 | 100.7 |

*Note:* Columns may not total 100% because of rounding.

*Source*: Indiana Business Research Center; U.S. Bureau of the Census.

holds headed by a single-parent male. The greatest proportional increases, however, were in the numbers of households headed by males with children, but no wives present (up 242%), and households headed by females with children, but no husbands present (up 130%).

The 1990 census of households found for the first time that there were more Indiana married couples who lived in households without children (30%) than with children (28%). The change is even more striking when comparing the 1990 figures with those for the 1970 census, when married couples with children represented 42% of all households. As was noted in the first *The State of the Child* report, young Hoosiers are truly "an increasingly scarce resource."[4]

***More Indiana married couples live in households without children than with children. Young Hoosiers, are "an increasingly scarce resource."***

### Ethnic differences in household types

As shown in Table 1.10, the distribution of types of households in Indiana varies widely by the race/ethnicity of the head of household (householder). While 38% of households with an Asian-American householder and 38% with a Hispanic/Latino householder are married couples with children, the proportion drops to 29% for white householders and to 28% for Native American householders. Of households with an African-American householder, 18% are married couples with children. African-American householders are more likely than all others to be living alone (27%) or with their children without a spouse present (27%). Single-parent families make up 7% of households with a white householder, but only 6% of the households with an Asian-American head. The economic ramifications of these differences in household type will be explored in Chapter 2.

***Only 73% of Hoosiers under age 18 in 1990 lived in households with two parents.***

## Where Hoosier Children Live

In 1960, nine in ten Hoosiers under age 18 lived in families headed by married couples. By 1990, only 73% lived with two parents. The proportion living with only mothers rose from 6% in 1960 to 15% in 1990; the proportion living with only fathers rose from 1% to 3% in the same thirty-year period. In the past decade, the proportion of children living with at least one parent fell slightly from 92.5% to 92.0%. An additional 6% of young Hoosiers lived with other relatives, while 2% lived completely outside their families, either in foster homes or group quarters (Table 1.11).

## Table 1.10 Indiana Households by Household Type and Race of Householder, 1990

| Family Households | White | African-American | Native American | Asian-American | Other Race | Hispanic/ Latino Origin* |
|---|---|---|---|---|---|---|
| **Married couple family** | | | | | | |
| With related children | 29.0 | 18.5 | 28.5 | 38.1 | 41.6 | 37.7 |
| No related children | 31.2 | 14.4 | 22.8 | 21.1 | 15.8 | 20.0 |
| **Male householder, no wife present** | | | | | | |
| With related children | 1.5 | 2.8 | 2.9 | 1.3 | 4.0 | 3.2 |
| No related children | 1.2 | 2.0 | 1.5 | 1.7 | 2.2 | 2.2 |
| **Female householder, no husband present** | | | | | | |
| With related children | 5.7 | 24.5 | 11.3 | 4.4 | 13.9 | 11.2 |
| No related children | 3.2 | 6.7 | 3.7 | 2.4 | 3.3 | 3.3 |
| **Nonfamily households** | | | | | | |
| Householder living alone | 23.9 | 26.9 | 22.7 | 22.4 | 14.0 | 17.3 |
| Householder not living alone | 4.2 | 4.2 | 6.6 | 8.7 | 5.2 | 5.2 |
| Number of households | 1,889,853 | 149,055 | 4,519 | 10,853 | 11,075 | 27,571 |

*Source*: U.S. Bureau of the Census.

## Table 1.11 Distribution of Indiana Children by Family Type, 1960-1990

| Living In | 1960 (%) | 1970 (%) | 1980 (%) | 1990 (%) |
|---|---|---|---|---|
| Married couple family | 89.8 | 85.9 | 81.4 | 73.4 |
| Family with male head | 0.9 | N/A | 2.3 | 3.1 |
| Family with female head | 6.5 | N/A | 14.6 | 15.5 |
| Other | 2.8 | 3.2 | 1.7 | - |
| Household with other relatives | - | - | - | 5.7 |
| Household with nonrelatives | - | - | - | 1.8 |
| In group quarters | - | - | - | 0.4 |

N/A = Data that are not available.

*Source*: U.S. Bureau of the Census.

## Births

Indiana's relatively slow population growth may be partially attributed to birthrates lower than the average for the United States. In 1990, the last year for which data are available, 85,986 infants were born in Indiana, both the largest number of births and the highest birthrate (15.5 per 1000 population) in several years (Table 1.12).[5] This figure is still well below the 16.7 per 1000 population birthrate for the nation as a whole in 1990.

Of the Indiana births in 1989, 73,350 were to white mothers and 9,851 to nonwhite mothers. Nearly one in four births in Indiana (24%) occurred outside of wedlock. Out-of-wedlock births constituted 18% of live white births, and 67% of live nonwhite births.[6]

**Table 1.12 Births in Indiana, 1984-1990**

| | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|---|
| Total live births | 79,883 | 80,928 | 79,269 | 78,515 | 81,414 | 83,201 | 85,986 |
| Birthrate per 1,000 population | 14.5 | 14.7 | 14.4 | 14.2 | 14.7 | 15.0 | 15.5 |

*Source*: Indiana State Department of Health.

## Deaths

There were 49,007 deaths in Indiana in 1989. Of these, 1.7% were children under one year of age; .3% were between the ages of one and four years; .5% were between the ages of five and 14 years; and 1.5% were between the ages of 15 and 24 years. Since 1986, statistics have been kept on the leading causes of death for these four age groups. Only causes from which ten or more children and young adults died are tabulated as leading causes; however, deaths from these causes constitute a majority of all deaths for each age group. Tables 1.13a through 1.13d summarize the causes of death.

Infants under one year of age are the most likely to die from congenital anomalies, a cause that declines among children ages one to four and thereafter. Sudden Infant Death Syndrome (SIDS) is the second most frequent cause of infant deaths, followed by respiratory conditions, maternal causes and immaturity. Five infants died of homicide. Among one- to four-year-olds—as well as among five- to 14-year-olds—the most frequent causes of death were nonvehicular accidents, followed by motor vehicle accidents, cancer, and congenital anomalies. Only in 1986 did homicide constitute a leading cause for one- to four-year-olds; seven children in this age group, along with eight five- to 14-year-olds died of homicide in 1989.

***By 1989, motor vehicle accidents and suicide were the 2 leading causes of death among Indiana teens and young adults.***

The leading cause of death among Indiana teens and young adults, ages 15 to 24, is motor vehicle accidents. Suicide is the second leading cause, followed by nonvehicular accidents and homicide. Complete Indiana mortality data are not available for the years since 1989, but the Indiana State Department of Health reports that suicides in this age group rose from 117 in 1989 to 124 in 1990. Indiana also appears to be following national trends that show homicide rates to be rising among those 15 to 24 years of age. Although the number of homicides in Indiana among this age group declined from 76 in 1989 to 72 in 1990, the homicide rate rose slightly. The wide availability of weapons and the growing willingness to use them are grim realities of community life for many adolescents.

### Table 1.13a Leading Causes of Death Among Indiana Children Under One Year of Age, 1986-1989

| | 1986 | | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|---|---|
| | No. | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths |
| Congenital anomalies | 199 | 22.4 | 168 | 21.5 | 179 | 20.0 | 187 | 22.1 |
| Sudden infant death syndrome | 126 | 14.2 | 120 | 15.4 | 153 | 17.1 | 143 | 16.9 |
| Other respiratory conditions | 91 | 10.2 | 67 | 8.6 | 87 | 9.7 | 65 | 7.7 |
| Maternal causes | 69 | 7.8 | 26 | 3.3 | 43 | 4.8 | 39 | 4.6 |
| Immaturity | 65 | 7.3 | 66 | 8.4 | 85 | 9.5 | 83 | 9.8 |
| Respiratory distress syndrome | 62 | 7.0 | 55 | 7.0 | 61 | 6.8 | 69 | 8.2 |
| Infections specific to perinatal period | 35 | 3.9 | 20 | 2.6 | 20 | 2.2 | 17 | 2.0 |
| Placenta, cord, membrane complications | - | - | 27 | 3.4 | 20 | 2.2 | 24 | 2.8 |
| Diseases of the heart | 23 | 2.6 | 23 | 2.9 | - | - | - | - |
| Intrauterine hypoxia and birth asphyxia | 22 | 2.5 | - | - | - | - | - | - |
| Pneumonia | - | - | - | - | 23 | 2.6 | | |
| Accidents (except motor vehicle) | 15 | 1.7 | - | - | - | - | 18 | 2.1 |
| All other perinatal conditions | - | - | 59 | 7.6 | 47 | 5.3 | 37 | 4.4 |
| Other diseases of the nervous system | - | - | - | - | - | - | 17 | 2.0 |
| Other symptoms | - | - | - | - | - | - | 17 | 2.0 |
| Leading causes of death combined | 707 | 79.6 | 631 | 80.7 | 718 | 80.2 | 716 | 84.6 |
| All deaths under one year of age | 888 | | 782 | | 895 | | 845 | |

*Note*: "Leading causes" account for 10 or more deaths; "-" indicates fewer than 10 deaths in that year.

*Source*: Indiana State Department of Health, Public Health Statistics.

## Table 1.13b Leading Causes of Death Among Indiana Children, Ages 1-4, 1986-1989

| | 1986 | | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|---|---|
| | No. | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths |
| Accidents (except motor vehicle) | 57 | 31.7 | 32 | 23.2 | 36 | 23.4 | 38 | 26.8 |
| Motor vehicle accidents | 25 | 13.9 | 20 | 14.5 | 16 | 10.4 | 19 | 13.4 |
| Cancer | 16 | 8.9 | 14 | 10.2 | 15 | 9.7 | - | - |
| Congential anomalies | 16 | 8.9 | 20 | 14.5 | 16 | 10.4 | 14 | 9.9 |
| Homicide | 15 | 8.3 | - | - | - | - | - | - |
| Other diseases of the nervous system | - | - | 10 | 7.2 | - | - | - | - |
| Other symptons | - | - | - | - | 11 | 7.1 | - | - |
| Diseases of the heart | - | - | - | - | 10 | 6.5 | - | - |
| Leading causes combined | 129 | 71.7 | 96 | 69.6 | 104 | 67.5 | 71 | 50.1 |
| All deaths, ages 1-4 | 180 | | 138 | | 154 | | 142 | |

*Note*: "Leading causes" account for 10 or more deaths; "-" indicates fewer than 10 deaths in that year.

*Source*: Indiana State Department of Health, Public Health Statistics.

## Table 1.13c Leading Causes of Death Among Indiana Children, Ages 5-14, 1986-1989

| | 1986 | | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|---|---|
| | No. | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths |
| Accidents (except motor vehicle) | 47 | 23.3 | 55 | 24.7 | 59 | 25.8 | 45 | 18.9 |
| Motor vehicle accidents | 45 | 22.3 | 56 | 25.1 | 55 | 24.0 | 59 | 24.8 |
| Cancer | 28 | 13.8 | 32 | 14.4 | 23 | 10.0 | 36 | 15.1 |
| Congenital anomalies | - | - | 15 | 6.7 | 11 | 4.8 | - | - |
| Other diseases of the nervous system | - | - | 11 | 4.9 | - | - | 14 | 5.9 |
| Leading causes combined | 120 | 59.4 | 169 | 75.8 | 148 | 64.6 | 154 | 64.7 |
| All deaths, ages 5-14 | 202 | | 223 | | 229 | | 238 | |

*Note*: "Leading causes" account for 10 or more deaths; "-" indicates fewer than 10 deaths in that year.

*Source*: Indiana State Department of Health, Public Health Statistics.

### Table 1.13d Leading Causes of Death Among Indiana Teens and Young Adults, Ages 15-24, 1986-1989

| | 1986 | | 1987 | | 1988 | | 1989 | |
|---|---|---|---|---|---|---|---|---|
| | No. | % of All Deaths | Nc | % of All Deaths | No. | % of All Deaths | No. | % of All Deaths |
| Motor vehicle accidents | 341 | 40.7 | 331 | 41.7 | 352 | 41.8 | 281 | 38.0 |
| Suicide | 115 | 13.7 | 113 | 14.2 | 117 | 13.9 | 117 | 15.8 |
| Accidents (except motor vehicle) | 82 | 9.8 | 88 | 11.1 | 96 | 11.4 | 82 | 11.1 |
| Homicide | 72 | 8.6 | 68 | 8.6 | 76 | 9.0 | 76 | 10.3 |
| Cancer | 63 | 7.5 | 56 | 7.1 | 48 | 5.7 | 36 | 4.9 |
| Diseases of the heart | 21 | 2.5 | 21 | 2.6 | 25 | 3.0 | 25 | 3.4 |
| Trauma (undetermined origin) | 17 | 2.0 | 14 | 1.8 | - | - | 13 | 1.8 |
| Congenital anomalies | 14 | 1.7 | 11 | 1.4 | 16 | 1.9 | - | - |
| Muscular dystrophy | 10 | 1.2 | - | - | 10 | 1.2 | - | - |
| Other symptoms and ill-defined conditions | - | - | 18 | 2.3 | 14 | 1.7 | 14 | 1.9 |
| Other diseases of the nervous system | - | - | - | - | 13 | 1.5 | 11 | 1.5 |
| Leading causes combined | 735 | 87.7 | 720 | 90.8 | 767 | 91.1 | 655 | 88.7 |
| All deaths, ages 15-24 | 837 | | 794 | | 843 | | 739 | |

*Note*: "Leading causes" account for 10 or more deaths; "-" indicates fewer than 10 deaths in that year.

*Source*: Indiana State Department of Health, Public Health Statistics.

## Notes

1. Indiana Business Research Center, *The Indiana Fact Book, 1992* (Indianapolis and Bloomington, IN: IBRC, Indiana University School of Business, Indiana University Press, 1992), pp. 3-4.

2. U.S. Census Bureau - STFIA Magnetic Tape File. Base data from the 1990 U.S. Census obtained from the Indiana Business Research Center, Indiana University School of Business, Bloomington, Indiana.

3. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1992* (Washington, DC: Center for the Study of Social Policy, 1992); Indiana Business Research Center, *Indiana Fact Book, 1992*; H. Hodgkinson, *A Demographic Look at Tomorrow* (Washington, DC: Institute for Educational Leadership, 1992).

4. Lilly Endowment Inc., *The State of the Child in Indiana, 1988* (Indianapolis: Lilly Endowment Inc., 1988), p. 1.

5. Indiana State Department of Health, Public Health Statistics.

6. Indiana State Department of Health, Public Health Statistics.

## Building Economic Independence

Indiana's young people will be exposed to a variety of educational and employment experiences that will contribute to vocational and career options. Their formal and nonformal educational experiences will prepare them to make the transition from school to work, to contribute to the labor force, and to participate in an economic environment that will grow increasingly more complex and will require lifelong learning.

Indiana Youth Institute
from *10 Blueprints for Healthy Development*

*Young people under age 18 make up about one-fourth of Indiana's population but represent more than a third of the Hoosiers living below the poverty level.*

BEST COPY AVAILABLE

# Highlights

*Most Hoosier high-school students want to go on to college and move into professional and managerial positions that require a degree. Only about two in ten jobs in Indiana currently require bachelor's degrees or more; this number is expected to rise to about three in ten by the year 2000.*

*Nearly two-thirds of Hoosier mothers with children younger than age 6 are working. More than three-fourths of the mothers with children ages 6 to 17 are working. A majority of young Hoosiers have both parents in the labor force.*

*The median income of Indiana's families lags behind that of the United States as a whole by more than $1,000 annually.*

*Income levels in Indiana counties vary widely. Income figures in the most prosperous counties are more than double those in the least prosperous counties.*

# Economics Introduction

The United States is in the midst of profound economic change and Indiana is changing along with the rest of the nation. Just over four decades ago, the 1950 U.S. Census revealed that, for the first time, more Americans were employed in the service sector than in the production sector of the nation's economy. Since that time, employment in the production sector, which includes manufacturing, has declined further, while growth in the service sector has outpaced all others. Many of the jobs created in the service sector offered much lower pay than did the manufacturing jobs they replaced. For the United States as a whole, manufacturing accounted for only 19% of earnings in 1990; by the year 2000, manufacturing's share of earnings is expected to decline further, to about 18%.[1]

National trends have had a powerful impact on Indiana's economy. Indiana also has lost many high-paying production jobs, but manufacturing continues to sustain a larger share of the state's economy than it does in the nation's economy as a whole. By the 1920s, Indiana had developed a strong manufacturing base that included the production of steel, motor vehicles, household appliances, machine shop products, pharmaceuticals, and glass containers. Because Indiana's industries were vital to the nation's wartime production, the 1940s were years of unprecedented prosperity, ushering in three decades of labor in-migration, particularly from the rural South. By the early 1950s, three-fourths of the Hoosier labor force was male, and six in ten workers held such "blue collar" jobs as operators, craftsmen, and general laborers. Manufacturing alone accounted for 46% of all employment in Indiana. In the boom years, young males, whether they had high school diplomas or not, could expect to move into the same kinds of jobs that their fathers held. After a few years on the line, they could anticipate incomes that would provide relatively secure and comfortable life-styles.[2] A very different reality confronts today's young men and women entering the labor force.

Hoosier students have high expectations for themselves. Most intend to finish both high school and college and move into professional and managerial occupations that will pay well enough to fill their desires for nice homes, good cars, and happy family lives.[3] Economic data for the state show that many will not fulfill their dreams.

***Hoosier students have high expectations for themselves. Economic data for the state show that many will not fulfill their dreams.***

## Poverty

Chapter 3 provides an overview of the rising numbers of poor and low-income families in Indiana. The chapter also examines some of the compromises that poverty imposes for the well-being of their children. Although Indiana has numerous social programs available, families and children continue to fall through the safety net. Issues of awareness, availability, accessibility, and affordability may form barriers to obtaining needed services.

## Data Sources

Economic data for Indiana cited in Chapter 2 come from the U.S. Bureau of the Census, the U.S. Department of Labor, and from the Indiana Business Research Center at Indiana University and the Indiana Department of Workforce Development. The Bureau of Child Labor supplied information about youth employment. The voices of high-school students supplement official statistics with information from the Indiana Youth Poll conducted by the Indiana Youth Institute.

Information about poverty in Indiana is drawn from the 1990 census and other publications of the U.S. Bureau of the Census. The Indiana Department of Health, the Indiana Family and Social Services Administration, and the Indiana Department of Education provided data on participation in income support programs. The Community Childhood Hunger Identification Project (CCHIP) described hunger in Indiana.

## Challenges:

- Linking labor-force information with other state databases; linking economic information with data on health, child maltreatment, and educational progress.
- Finding ways to communicate information about labor-force realities to Hoosier high-school students.
- Gaining better understanding of the barriers to seeking available services.
- Evaluating the short- and long-term effects of income-support programs currently available to Hoosiers living in poverty.
- Gaining a better understanding of the needs of Indiana's low-income families who do not qualify for assistance benefits.
- Finding meaningful ways to communicate knowledge about the impact of poverty and near poverty on the lives of Hoosier families and children.

## Notes

1. Indiana Business Research Center, *The Indiana Fact Book, 1992* (Bloomington and Indianapolis: Indiana Business Research Center, Indiana University School of Business, 1992), pp. 20, 22.

2. Indiana Economic Development Council, Inc., *Looking Forward: The Update of Indiana's Strategic Economic Development Plan—Stategies for the Future*, 1987-88 Update, volume 2, Draft (Indianapolis: Indiana Economic Development Council, 1987), pp. 13-17.

3. J. B. Erickson, *Indiana Youth Poll: Youths' Views of Life Beyond High School* (Indianapolis: Indiana Youth Institute, 1992).

## Chapter 2

# Work and Income

Indiana's workforce is changing in ways that are having a profound impact on Hoosier families. The U.S. Census of 1990 reveals, for example, that the proportion of males in the 1990 Hoosier labor force had fallen to just over half (54%), down from three-fourths four decades earlier. The proportion of the state's jobs in the manufacturing sector had fallen to a fourth, a decline of more than 20% in just two decades.[1] A report by the Indiana Business Research Center (IBRC) found that in 1989 manufacturing accounted for 22% of the state's employment. The same report also shows that the manufacturing sector actually grew slightly (about 6%) between 1985 and 1989. In terms of earnings, Indiana's manufacturing sector also remains important, accounting for just over 31% of the total in 1990. The IBRC projects that manufacturing will account for almost the same proportion of Indiana's total earnings in the year 2000.

**Table 2.1 U.S. Labor-Force Projections 1990-2005 by Major Occupational Group and Distribution of Indiana Labor Force, 1990**

| Occupational Group | U.S. Job Openings 1990 - 2005 (%) | Indiana Labor Force, 1990 (%) |
|---|---|---|
| Managerial | 9.9 | 8.6 |
| Professional specialty | 14.3 | 10.0 |
| Technicians | 4.2 | 2.7 |
| Marketing and sales | 13.6 | 12.2 |
| Administrative support | 14.8 | 15.1 |
| Service | 20.1 | 14.2 |
| Precision production | 10.4 | 13.7 |
| Operators/laborers | 10.9 | 20.4 |
| Agriculture related | 2.0 | 2.7 |
| **Total** | **100.2** | **99.6** |

*Note*: Columns may not total 100% because of rounding.

*Source*: U.S. Department of Labor, Indiana Department of Employment and Training.

Table 2.1 compares Indiana's 1990 labor-force distribution by occupational group with the distribution of anticipated job openings in the U.S. labor force between 1990 and 2005. Comparable labor-force projections for Indiana are not available. If the manufacturing sector remains strong, however, Indiana may continue to have a higher proportion of job openings for precision production workers, operators and laborers than expected for the United States as a whole. This, in turn, would mean that Indiana would be likely to have a relatively smaller proportion of openings in the managerial, professional specialty, and technical fields than would many other parts of the nation. The new blue-collar jobs will require higher-level and more-flexible skills than in the past. The capacity to meet changed workforce needs will determine whether Indiana's industries remain competitive in the global marketplace.

## Career Aspirations Among High-School Students

How do the aspirations of Hoosier young people fit with Indiana's labor-force needs? In 1990, the Indiana Youth Institute polled 1,560 high-school students from across the state about the careers they hoped to have at age 30. Projecting that far into the future was a difficult task for most. Many respondents would have agreed with the student who wrote, "I don't know what I'm doing at 30 & right now I don't care. I'm 16 [and] I have 14 years to think about this topic and now all I'm worried about is the weekends and school." Even if their stated aspirations ultimately turn out to be far from reality, they do nonetheless provide a sense of what Hoosier young people today think is a good job. Their responses have been compiled in Table 2.2.

***"I don't know what I'm doing at 30 & right now I don't care. I'm 16 and now all I'm worried about is the weekends and school."***

Almost two in three students (64%) hope to have occupations that require at least a baccalaureate degree. The Indiana labor-force distribution suggests that in 1990 only about two in ten Indiana occupations required a bachelor's degree or higher. Despite this fact, young Hoosiers appear to have gotten the message that going to college is a necessary thing to do. Nearly eight in ten (78%) of the students responding to the youth poll expect to complete college. Many (39%) had already discerned that a lack of jobs or a poor state economy could become barriers to obtaining the work they want. Slightly more than half (51%)—disproportionately those with higher educational and career aspirations—expected to live outside Indiana at age 30. Reasons cited most often were that Indiana lacks opportunities and that better opportunities were available in other states. Recent income figures for Indiana and the nation suggest that students' concerns are at least partially warranted.

**Table 2.2 Desired Occupations at Age 30, by Gender**

| Occupation | All | Males | Females |
|---|---|---|---|
| Professional I<br>(Bachelor's degree required) | 33.0 | 30.0 | 38.0 |
| Professional II<br>(Postgraduate education required) | 18.7 | 18.4 | 20.6 |
| School teacher | 6.3 | 2.3 | 9.5 |
| Administrator | 3.6 | 3.5 | 4.0 |
| Proprietor/owner | 3.2 | 4.9 | 2.5 |
| Service | 3.1 | 1.2 | 4.6 |
| Protective service | 3.0 | 5.5 | 1.7 |
| Clerical | 2.6 | 1.7 | 3.4 |
| Farmer/farm manager | 2.6 | 5.4 | 1.1 |
| Craftsman | 2.5 | 5.9 | 0.6 |
| Technical | 2.4 | 2.9 | 2.3 |
| Military | 1.5 | 2.9 | 0.8 |
| Sales | 1.2 | 2.1 | 0.8 |
| Operative | 0.8 | 1.6 | 0.3 |
| Laborer | 0.6 | 1.2 | 0.3 |
| Homemaker | 0.3 | 0 | 0.6 |
| Other | 2.7 | | |
| Not working | 0.3 | | |
| Don't know | 4.9 | | |
| No information | 6.5 | | |

*Source*: Indiana Youth Institute poll of 1,560 Indiana high-school students, 1990.

## Some Economic Realities

Throughout the 1970s, the median income for *four-person* families in Indiana was nearly the same as, or slightly higher than, that of the nation. In the 1980s, however, Indiana incomes began to lag. In 1980, the gap was only $289; by 1989, the latest year for which comparable income data are available, the gap had widened to $2,542. In other words, the median income for four-person Indiana families was $38,201; nationally, the figure was $40,743.[2] The 1990 Census reveals a similar discrepancy between *all* Hoosier families and those of the entire nation. The median family income in Indiana in 1989 was $34,082, while for the U.S. as a whole it was $35,225, leaving Indiana families behind by $1,143. Table 2.3 presents comparative information from the 1990 census on the distribution of Indiana and U.S. family incomes. Generally, Indiana family incomes are more concentrated in the middle range, leaving fewer in either the very low or very high income groups.

**Table 2.3 Distribution of Incomes for 1,490,130 Indiana Families and 65,049,428 U.S. Families, 1989**

| | Indiana | | United States | |
|---|---|---|---|---|
| **Income in 1989** | **%** | **Cumulative %** | **%** | **Cumulative %** |
| Less than $5,000 | 3.4 | 3.4 | 4.0 | 4.0 |
| $5,000 - $9,999 | 4.5 | 7.9 | 5.6 | 9.6 |
| $10,000 - $14,999 | 7.0 | 14.9 | 7.2 | 16.8 |
| $15,000 - $24,999 | 18.0 | 32.9 | 16.4 | 33.2 |
| $25,000 - $34,999 | 18.7 | 51.6 | 16.5 | 49.7 |
| $35,000 - $49,999 | 22.8 | 74.4 | 20.4 | 70.1 |
| $50,000 - $74,999 | 17.8 | 92.2 | 18.2 | 88.3 |
| $75,000 - $99,999 | 4.7 | 96.9 | 6.3 | 94.6 |
| $100,000 - $149,999 | 2.0 | 98.1 | 3.5 | 98.1 |
| $150,000 or more | 1.1 | 100.0 | 1.9 | 100.0 |
| **Total** | **100.0** | | **100.0** | |
| Median Income | | $34,082 | | $35,225 |

*Source*: U.S. Bureau of the Census, 1990.

Table 2.4 examines the median incomes of households, families, and persons for the nation, Indiana, and neighboring states. Household incomes are generally lower than those for families because more households have only one wage earner. Nationally, after adjusting for inflation, the median household income increased by about 6% between 1979 and 1989.

Indiana and the four neighboring states all experienced declines in household income (in constant dollars).[3] Kentucky, Michigan, and Ohio all experienced greater declines than Indiana's decrease of 2%. Among all five states, only Kentucky had lower family and per capita income figures than did Indiana in 1989.[4] Among all 50 states and the District of Columbia, Indiana ranked 25th in median household income, 24th in median family income, and 29th in per capita income.

**Table 2.4 Household, Family, and Per Capita Income, 1989; United States, Indiana, and Neighboring States**

| | Median Household Income ($) | % Change 1979-1989* | Median Family Income ($) | Median Per Capita Income ($) |
|---|---|---|---|---|
| United States | 30,056 | 6.5 | 35,225 | 14,420 |
| **Indiana** | **28,797** | **- 2.3** | **34,082** | **13,149** |
| Illinois | 32,252 | - 0.4 | 38,664 | 15,201 |
| Kentucky | 22,534 | - 3.7 | 27,028 | 11,153 |
| Michigan | 31,020 | - 3.7 | 36,652 | 14,154 |
| Ohio | 28,706 | - 3.5 | 34,351 | 13,461 |

*After adjusting for increase in consumer prices, using an inflation factor of 1.676.

*Source*: U.S. Bureau of the Census, 1990.

The U.S. Department of Commerce updated per capita income figures for 1991. For the United States as a whole, per capita income grew just 2.4% from that in 1990. Adjusted for inflation, however, the national figure of $19,092 represented an actual income decline of 1.9%. For the third year in a row, the inflation-adjusted per capita income figures were lower than they were the year before. Indiana's rank fell to 32nd in 1991, with a per capita income of $17,179. Indiana's per capita income remains higher than that of Kentucky, but lower than that of the other adjoining Great Lakes states. Kentucky's increase, at 4.4%, gave that state one of the five highest income-growth rates in the nation, but at $15,626, per capita income was still far below the national average.[5]

## Differences in Income Among Ethnic Groups

The impact of economic change throughout the industrial midwest has been unequally distributed. The 1990 census reveals that real income declined overall in Indiana and all four adjoining states. Regionally, households headed by African-Americans were hardest hit. The median income for households headed by African-Americans in Indiana dropped 16% compared with an income drop of one percent for households headed by whites. African-American household income is 65% of white household income in Indiana, slightly more than the national average of 63% and the highest in the five-state region (Table 2.5). These figures still mean, however, that in 1989 Hoosier African-American households brought in only about 65 cents to every dollar that went to a white Hoosier household.

**Table 2.5 Median Household Income by Race of Householder; United States, Indiana and Neighboring States, 1989**

| | U.S. ($) | Indiana ($) | Illinois ($) | Kentucky ($) | Michigan ($) | Ohio ($) |
|---|---|---|---|---|---|---|
| All households | 30,056 | 28,797 | 32,252 | 22,534 | 31,020 | 28,706 |
| White | 31,435 | 29,588 | 34,358 | 23,202 | 32,463 | 30,026 |
| African-American | 19,758 | 19,101 | 20,990 | 14,871 | 18,851 | 17,716 |
| Native American | 20,025 | 22,779 | 24,298 | 16,972 | 21,738 | 19,886 |
| Asian-American | 36,784 | 31,436 | 38,442 | 30,712 | 38,327 | 34,243 |
| Other races | 22,813 | 26,615 | 26,484 | 20,784 | 24,319 | 21,630 |
| Hispanic/Latino origin* | 24,156 | 28,019 | 27,945 | 21,805 | 26,939 | 25,053 |
| African-American household income as a % of white household income | 62.9 | 64.6 | 61.1 | 64.1 | 58.1 | 59.0 |

*Persons of Hispanic/Latino origin may be of any race.

*Source*: U.S. Bureau of the Census, 1990.

The median incomes of Indiana's households headed by individuals of other ethnic groups vary from a high of $31,436 for Asian-Americans to a low of $22,779 for Native Americans. Disparities can be understood more clearly when income distributions for each ethnic group are placed side by side (Table 2.6). Within each ethnic group, incomes differ widely. Both within and among race/ethnic groups, variations in income are related to the levels of education, family composition, and unemployment rates.

***Both within and among race/ ethnic groups, variations in income are related to the levels of education, family composition, and unemployment rates.***

## Geographic Differences in Income

According to the 1990 census, income levels differed widely from county to county within Indiana. The most affluent counties were both in the Indianapolis metropolitan area: Hamilton County, with a median family income of $51,167 and a per capita income of $20,426; Hendricks County, with a median family income of $44,257 and a per capita income of $17,454. Median family incomes and per capita incomes for the state's five most populous counties were as follows: Marion, $35,054 and $14,614; Lake, $35,604 and $12,663; Allen, $37,866 and $14,631; St. Joseph, $34,206 and $13,277; and Vanderburgh, $32,558 and $13,434.

The least prosperous were adjoining rural counties in southern Indiana: Orange, with a median family income of $24,813 and per capita income of $9,222; Crawford, with a median family income of $23,307 and per capita income of $8,837. The median income figures for Indiana's poorest county are less than half those of the state's wealthiest county. Median family income in the poorest counties is not a great deal higher than the federal poverty level, set at $13,950 for a family of four.

## Participation in the Labor Force

### Working men and women

The 1990 census found 2,798,370 persons ages 16 and older participating in the Hoosier labor force. Thus, three-fourths (75%) of the state's males and more than half of the females (57%) in this age group were working or actively seeking work in 1990 (Table 2.7). Nationally, 74% of the males and 57% of the females ages 16 and over were in the labor force in 1990. In Indiana, 54% of the labor-force participants were male, and 46% were female; the comparable national figures were 55% and 45%, respectively. Thus, a slightly higher proportion of Hoosiers than of all Americans are in the labor force, but the gender ratio is about the same.

## Table 2.6 Distribution of Household Income by Race of Householder, Indiana, 1989

| | All Households (%) | White (%) | African-American (%) | Native American (%) | Asian-American (%) | Other races (%) | Hispanic/ Latino Origin* (%) |
|---|---|---|---|---|---|---|---|
| Under $5,000 | 5.5 | 4.6 | 15.6 | 9.2 | 10.9 | 10.3 | 8.9 |
| $5,000 - $9,999 | 9.1 | 8.7 | 14.3 | 14.3 | 6.5 | 8.9 | 8.6 |
| $10,000 - $14,999 | 9.3 | 9.1 | 11.3 | 10.3 | 9.5 | 9.6 | 8.6 |
| $15,000 - $24,999 | 19.3 | 19.3 | 18.9 | 19.2 | 14.9 | 18.3 | 18.3 |
| $25,000 - $34,999 | 17.3 | 17.6 | 13.6 | 18.7 | 12.8 | 19.5 | 18.9 |
| $35,000 - $49,999 | 19.3 | 19.8 | 13.8 | 17.0 | 14.6 | 21.4 | 20.9 |
| $50,000 - $74,999 | 14.1 | 14.6 | 9.2 | 8.8 | 15.6 | 9.8 | 11.9 |
| $75,000 - $99,999 | 3.7 | 3.8 | 2.5 | 1.4 | 5.9 | 1.6 | 2.6 |
| $100,000 or more | 2.5 | 2.6 | 0.8 | 1.1 | 9.5 | 0.5 | 1.4 |
| *N* = | 2,064,246* | 1,889,378 | 147,344 | 5,314 | 10,534 | 11,676 | 27,022 |

*Persons of Hispanic/Latino origin may be of any race.

*Source*: U.S. Bureau of the Census, 1990.

## Working parents

For some, a nostalgic ideal still defines the traditional American family as a securely employed male head-of-household, a nonworking wife, and children. In reality, such families constituted fewer than one in ten U.S. households in the 1990s. As discussed in Chapter 1, a smaller proportion of households include children, and households that do include children are increasingly headed by a single parent. At any given time, however, about three-quarters of American children of school age are living in households with two adults. In a majority of cases, both adults are in the labor force. More than six in ten Hoosiers younger than age six, and seven in ten between six and 17 live in households where all parents—whether one or two—are working (Table 2.7).[6]

**Table 2.7 Labor Force Participation, 1990**

| Labor Force Participation | United States (%) | Indiana (%) |
|---|---|---|
| All Persons 16 years and older | 65.3 | 65.9 |
| All Males 16 years and older | 74.4 | 75.2 |
| All Females 16 years and older | 56.8 | 57.4 |
| With own children | | |
| Under age 6 | 59.7 | 63.6 |
| Ages 6 to 17 | 75.0 | 77.4 |
| Children in families and sub-families with all parents in the labor force | | |
| Under age 6 | 56.6 | 60.7 |
| Ages 6 to 17 | 67.7 | 71.4 |

*Source*: U.S. Bureau of the Census.

Participation of mothers in the labor force has risen steadily for several decades (Table 2.8). In 1960, slightly more than two in ten mothers with children younger than age 6 were employed, both in Indiana and in the U.S. as a whole. By 1970, the proportion of Hoosier mothers in the workforce had grown to nearly one in three, by 1980, to nearly half, and by 1990, to nearly two-thirds. Among Indiana mothers with children ages 6-17, just over half were employed in 1970, a proportion that grew to more than three-fourths by 1990. Participation in the labor force among Hoosier mothers continues to outpace that of American mothers generally, creating a growing need for high-quality child care for both the state's preschool and school-age children.

**Table 2.8 Labor Force Participation of Mothers, 1960-1990 (United States and Indiana)**

| | 1960 | | 1970 | | 1980 | | 1990 | |
|---|---|---|---|---|---|---|---|---|
| **Mothers in the Labor Force** | **U.S. (%)** | **Indiana (%)** | **U.S. (%)** | **Indiana (%)** | **U.S. (%)** | **Indiana (%)** | **U.S. (%)** | **Indiana (%)** |
| With own children | | | | | | | | |
| Under age 6 | 21.1 | 21.2 | 32.2 | 32.9 | 46.6 | 47.1 | 59.7 | 63.6 |
| Ages 6 to17 | - | - | 51.5 | 52.5 | 64.4 | 64.0 | 75.0 | 77.4 |

*Source*: U.S. Bureau of the Census, 1990, *State of the Child in Indiana*, 1988.

## Unemployment

In recent years, Indiana has had one of the lower unemployment rates in the nation. According to the 1990 census, when the national unemployment rate was 6.3%, the rate was 5.7% in Indiana, lower than in any of the four contiguous states.[7] The average unemployment rate for the entire year 1990 was 5.3%—again, the lowest in the five-state region.[8] In 1991, the latest full year for which unemployment data are available, Indiana had an estimated rate of 5.9% compared with a rate of 6.7% for the nation as a whole. Not all of Indiana enjoyed the lower unemployment rate, however. Rates varied widely among Indiana's ethnic groups and from one county to another.

## Ethnic Differences in Unemployment

Unemployment *rates* are particularly high among both males and females in Indiana's African-American community and are above the national averages. African-American unemployment rates are also higher than those of Indiana's other racial/ethnic groups. The unemployment rates for all other Hoosier racial/ethnic groups—white, Native American, Asian-American, other races, and persons of Hispanic/Latino origin—are lower than the national averages for their groups (Table 2.9).

**Table 2.9 Unemployment Rates by Gender and Race Among Persons 16 Years and Older in the Labor Force, Indiana and United States, 1990**

| | Males | | Females | |
|---|---|---|---|---|
| | Indiana (%) | U.S. (%) | Indiana (%) | U.S. (%) |
| All persons | 5.7 | 6.4 | 5.8 | 6.2 |
| White | 5.1 | 5.3 | 5.1 | 5.0 |
| African-American | 15.5 | 13.7 | 13.4 | 12.2 |
| Native American | 10.1 | 15.4 | 10.3 | 13.1 |
| Asian-American | 4.4 | 5.1 | 6.6 | 5.5 |
| Other races | 9.5 | 10.5 | 10.4 | 12.8 |
| Hispanic/Latino origin* | 8.6 | 9.8 | 10.0 | 11.2 |

*Persons of Hispanic/Latino origin may be of any race.

*Source*: U.S. Bureau of the Census, 1990.

## Geographic Variations in Unemployment

Geographically, unemployment ranged from an annual rate of 3% or less in Hamilton and Hendricks Counties to more than 9% in Blackford, Fayette, Henry, Jay, Lawrence, Orange, Perry, Randolph, Switzerland, and Wayne counties.[9] Counties with the state's highest unemployment rates have predominantly white populations; they also have rural populations well above the state average of 35%. In several other counties with high rural populations—Brown, Crawford, Ohio, and Owen, for example—the average travel time to work is more than half an hour (compared with the state average of 20 minutes),[10] suggesting that many rural Hoosiers need to travel long distances to find and keep jobs.

## Youth in the Labor Force

Adolescents and young adults form an important component of the nation's labor force, performing much of the minimum-wage or low-wage work of restaurants, retail, and fast food establishments. Teens are also responsible for after-school and evening child care in millions of families.

Working youth are not a new phenomenon. Until the end of the 19th century, most adolescents had become full-time workers by age 14, learning their trades on the job. By the turn of the century, however, changes in the national economy were making child and adolescent labor less practical. Reform efforts were also under way to rescue young workers from overwork or hazardous workplaces and to keep them in school.

Beginning in the 1950s, young people voluntarily began to return to the labor force, mainly after school, on weekends, and during summer vacations. In general, adults approved their ambition, feeling that such part-time work prepared them for future full-time employment. As the end of this century approaches, the needs of the nation's labor force are again shifting. One of the salient issues being addressed in current discussions of education reform is how teen employment affects classroom performance and what role it plays in preparing young people for work roles in the 21st century. It is important to try to understand where youth employment stands today.

***One of the salient issues being addressed in current discussions of education reform is how teen employment affects classroom performance and what role it plays in preparing young people for work roles in the 21st century.***

## Youth Employment

Most young Americans cannot wait until the day they can get a "real job." Young Hoosiers are no different. The Indiana Youth Poll found nearly six in ten of the high-school respondents working for pay outside the home during the months that school was in session.[11] Adult encouragement of teen work is based on the hope that young people will acquire a work ethic, gain time management skills, and learn to get along with others. Studies have shown that these benefits can accrue, but such positive outcomes can be achieved through working only fifteen or fewer out-of-school hours per week. Beyond this investment of time, the studies found, costs begin to exceed benefits. Excessive work is associated with lowered grades, reduced enrollment in challenging courses, and, for some, lessened exploration of nonacademic interests through out-of-school activities. While extracurricular activities may at first glance seem marginal, studies have found that participation in such activities is associated with somewhat higher levels of education, occupation, and income in adult life. Participants are also more likely, as adults, to be members of community organizations and to be more active in the political process.[12]

## Work Certificates

Indiana has created legislation that attempts to keep paid work from undermining school work. The General Assembly has placed limits on the hours students may work and the type of work that they may do (see box for summary of hour restrictions). Work certificates are issued to young people ages 14-17, generally by an issuing officer at the school attended. A work certificate permits a student to work at a specific enterprise. When employment ceases, the certificate must be returned to the issuing officer before another one may be issued for a new enterprise. This process attempts to keep young people from extending their hours by working at more than one job.

Youth employment tends to rise in good economic times and to fall during periods when adult unemployment is higher (Figure 2.1). The issuance of certificates to 14- to 16-year-olds reached an all-time high of 51,458 in FY 1978-79. However, with economic recession, the number of certificates issued fell to a record low of 21,914 in FY 1981-82 and remained low through FY 1983-84. The number of certificates issued began to climb again thereafter, reaching a high of 44,636 in FY 1988-89, only to decline again to 42,445 in FY 1990-91. Some of the decline reflects the smaller numbers of teens in Indiana's population.

Beginning July 1, 1990, 17-year-olds were also required to have work permits, and 22,327 were issued in FY 1990-91. Although these figures are the best available account of the total number of young Hoosiers who are working, they are underestimates. Many teens continue to work legally

### Indiana's Child Labor Laws

**Workers 14-15 years old are restricted to:**

3 hours on a school day;

No more than 18 hours in a school week;
8 hours on a nonschool day;
No more than 40 hours in a nonschool week

They may not work before 7:00 a.m. or after 7:00 p.m.;
however, they may work until 9:00 p.m. from June 1 through Labor Day

**Workers 16 years old are restricted to:**

8 hours per day (9 hours during summer*)
40 hours per week (48 hours during summer*)

They may not work before 6:00 a.m. or after 10:00 p.m. on nights followed by a school day; During the summer, and on nonschool nights they may work until midnight.*

**Workers 17 years old are restricted to:**

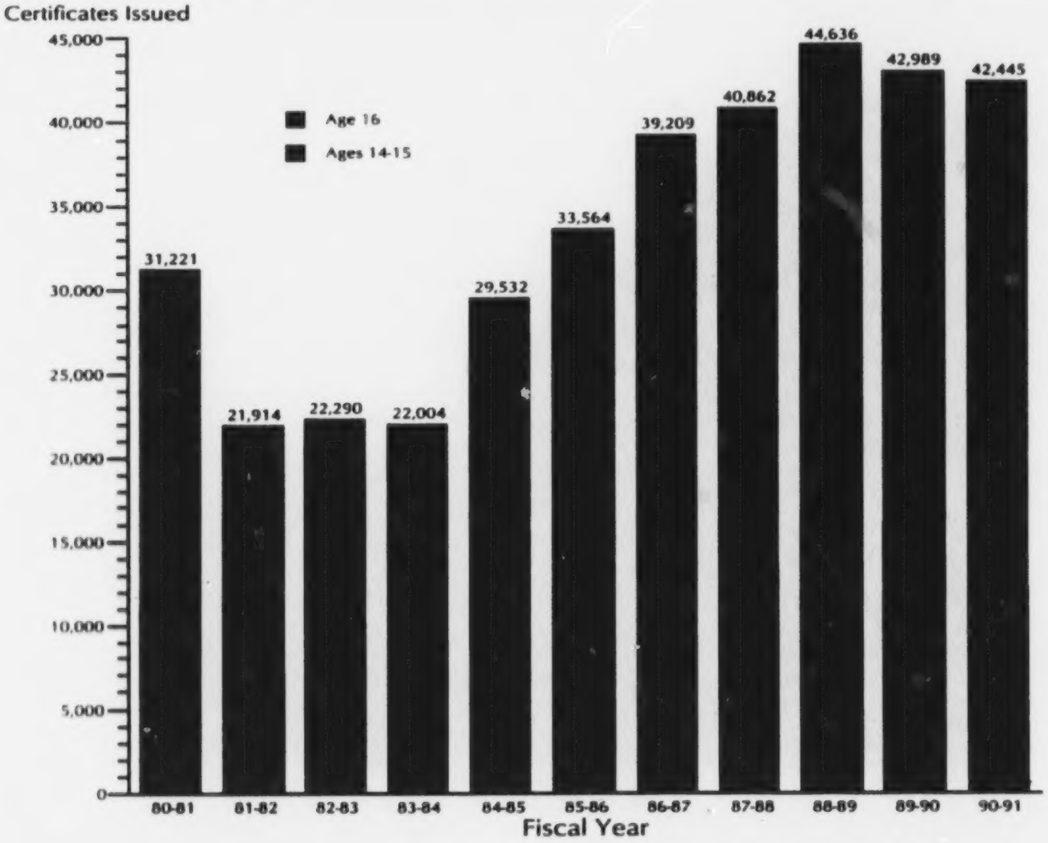
8 hours per day (9 hours during summer*)
40 hours per week (48 hours during summer*)

They may not work on a regular basis before 6:00 a.m. or after 11:30 p.m. on nights followed by a school day; however, they may, on occasion work later than 11:30 p.m. on nights followed by a school day, but not on consecutive nights, nor more than two school nights per week.*

*Requires written parental permission.

with certificates issued in prior years, and others may have been issued more than one certificate in a given year. Many students work without permits, however. The Indiana Bureau of Child Labor conducts both work-site inspections and follow-up visits following complaints. In FY 1990-91, the Bureau of Child Labor found nearly one in four (24%) of the sites visited to be in violation of rules governing employed minors. Employing minors without permits was one of the most common infractions; 19% of the youths working at enterprises inspected in FY 1990-91 did not have valid work permits, a slight decrease from the 21% found without valid permits in FY 1989-90. More stringent enforcement appears to have increased compliance with the law.

**Figure 2.1 Employment Certificates Processed Per Fiscal Year, July 1, 1980 - June 30, 1991**



*Note*: In addition to numbers quoted here, 22,327 certificates were issued to 17-year-olds in 1990-91.

*Source*: Indiana Department of Workforce Development, Bureau of Child Labor.

BEST COPY AVAILABLE

## On-the-Job Safety

The process for acquiring a work certificate, which involves both young worker and employer, allows the Bureau of Child Labor to monitor the safety of working conditions. Even so, 438 workers younger than age 18 were injured on the job in 1990. The youngest injured worker was ten years old. Not surprising, most of the injuries occurred in retail trade industries (which include food service enterprises), places that employ the largest proportion of young people. Injuries to young workers were also relatively high in the agriculture, forestry and fishing sector. No workers younger than 18 were fatally injured on the job in 1990; five fatalities occurred among 18- to 24-year-olds. Two of these were homicides at retail trade establishments.[13]

## Restriction of Hours

Although Indiana law restricts 14- to 15-year-olds to 23 hours of work per week during the school term, 11% of the working 14-year-olds and 27% of the working 15-year-olds who responded to the Indiana Youth Poll in 1990 reported putting in more than 23 hours weekly. Sixteen- and 17-year-old students were restricted to 40 hours per week; however, 5% of the working 16-year-olds and 5% of the working 17-year-olds also reported hours in excess of the legal limit (Table 2.10).[14] The 10% of working students polled who reported excessive hours of work may represent an underestimate of hours violators, for the Bureau of Child Labor found that 12% of the youths working in enterprises inspected in FY 1990-91 had violated hours restrictions. In the previous year, FY 1989-90, inspections found that 33% of the youths had hours violations.

## The Jobs Youths Hold

Indiana teens, like their counterparts across the nation, tend to work in low-skill, low-pay jobs. Seven in ten Youth Poll respondents had jobs concentrated in just five areas: fast food/restaurants/concessions (24%); babysitting (16%); retail sales (16%); farming (9%); and yard-work and landscaping (6%) (Table 2.11). Younger students did most of the babysitting and yard work/landscaping, whereas older youths held more food service and clerical jobs. Similar patterns occur in the types of businesses for which work certificates were issued (Table 2.12). Babysitting and work on their own family farms are not included in the certificate process.

**Table 2.10 Hours Per Week Spent Working for Pay, by Age**

| Hours | 14 | 15 | 16 | 17 | 18 | 19 | All |
|---|---|---|---|---|---|---|---|
| None | 53.2 | 53.9 | 43.4 | 36.7 | 28.8 | 25.0 | 42.6 |
| 1 - 9 | 14.9 | 20.4 | 14.9 | 10.7 | 11.2 | 8.3 | 14.4 |
| 10 - 20 | 26.6 | 13.1 | 25.2 | 27.2 | 25.6 | 20.8 | 23.0 |
| 21 - 30 | 2.1 | 6.1 | 9.6 | 15.8 | 19.4 | 25.0 | 11.4 |
| 31 - 40 | 2.1 | 2.9 | 4.3 | 6.5 | 11.3 | 20.8 | 5.5 |
| > 40 | 1.1 | 3.5 | 2.6 | 3.0 | 3.7 | 0 | 2.9 |
| **Total %** | **100.0** | **99.9** | **100.0** | **99.9** | **100.0** | **99.9** | **99.8** |
| *N* = | 94 | 343 | 417 | 430 | 160 | 24 | 1,468 |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Youth Institute poll of 1,560 Indiana high-school students, 1990.

## 1992 Legislation

Legislation passed by the General Assembly in 1992 makes issuance of a work certificate contingent on school progress by giving the issuing officer power to deny a certificate to a student whose attendance is not in good standing or whose academic performance does not meet the school corporation's standard. The officer also has power to revoke a certificate already in force if a student's grade point average falls significantly or school attendance declines. The legislation also lowers to 18 the number of hours that 14- and 15-year-olds can work during a school week, effective July 1, 1992. (Had this law been in effect when the Youth Poll was conducted, an additional 8% of the 14- and 15-year-old students would have been in violation.) Unfortunately, no funds were allocated to monitor the impact of these changes in the law on youth employment, academic progress, and dropping out of school.[15]

## Present Work and Future Careers

Earning money provides the greatest incentive for most students who work. Teenage consumers are the focus of multibillion-dollar product lines. Advertising continues to elevate their sense of what they "need" to live successfully in their adolescent worlds. Adults tend to view teen employment as a way of preparing for the *future*. The Indiana Youth Poll was concerned with how students felt about teen employment and asked: "How do you think the work that you are doing now relates to the work you want to do as an adult?" As always, the students' responses were revealing (Table 2.13). Nearly four in ten (39%) saw no relationship at all, while 17% felt that current work was directly related to a future career. Young workers made comments such as, "I want to be a teacher, so babysitting helps me relate to kids"; "I want to go into agriculture sales and the job that I do is just that"; or, "When I clean house I like to rearrange things. I want to be an interior designer." For others, workplaces provided

**Table 2.11 Jobs Held by Students**

| Jobs | Number | | | % of all Students | % of all Job Holders |
|---|---|---|---|---|---|
| | Male | Female | All | | |
| Total job holders | 355 | 522 | 877 | 57.3 | 100.0 |
| Restaurant/concessions/fast food | 58 | 151 | 209 | 13.7 | 23.8 |
| Baby sitting | 10 | 135 | 145 | 9.5 | 16.5 |
| Sales/clerk/cashier | 57 | 81 | 138 | 9.0 | 15.7 |
| Farm | 63 | 18 | 81 | 5.3 | 9.2 |
| Landscape/yardwork | 43 | 12 | 55 | 3.6 | 6.3 |
| Janitor/cleaning/chores | 18 | 30 | 48 | 3.1 | 5.5 |
| Aide to professional | 20 | 26 | 46 | 3.0 | 5.2 |
| Office work | 4 | 25 | 29 | 1.9 | 3.3 |
| Stock/inventory | 19 | 5 | 24 | 1.6 | 2.7 |
| Construction | 15 | 1 | 16 | 1.0 | 1.8 |
| Sports (caddy, lifeguard, etc.) | 4 | 9 | 13 | 0.9 | 1.5 |
| Factory | 7 | 3 | 10 | 0.7 | 1.1 |
| Music/stage | 4 | 0 | 4 | 0.3 | 0.5 |
| Other | 33 | 26 | 59 | 3.7 | 6.7 |
| Do not work | 265 | 387 | 652 | 42.6 | |
| **Total** | **620** | **909** | **1,529** | **99.9** | |

*Note:* Columns may not total 100% because of rounding.

*Source:* Indiana Youth Institute poll of 1,560 Indiana high-school students, 1990.

**Table 2.12 Youth Employment Certificates Processed by Indiana Bureau of Child Labor FY 1990-1991, by Type of Work Site and Age of Student**

| | Age | | | |
|---|---|---|---|---|
| | 14 - 15 (%) | 16 (%) | 17 (%) | Total (%) |
| Agriculture | 0.5 | 0.1 | 0.2 | 0.2 |
| Amusement/recreation | 8.2 | 3.9 | 4.1 | 4.8 |
| Construction | 0.8 | 0.2 | 0.3 | 0.4 |
| Drug stores | 0.3 | 0.5 | 0.9 | 0.6 |
| Filling stations/garages | 0.5 | 0.3 | 0.5 | 0.4 |
| Groceries/markets | 5.4 | 11.0 | 11.4 | 10.1 |
| Hospitals | 0.1 | 0.3 | 0.4 | 0.3 |
| Hotels/motels | 0.9 | 0.5 | 0.5 | 0.6 |
| Manufacturing | 0.9 | 1.2 | 1.9 | 1.4 |
| Municipalities | 14.9 | 4.9 | 6.8 | 7.4 |
| Offices | 0.9 | 0.5 | 1.5 | 0.9 |
| Processing | 0.1 | 0.1 | 0.1 | 0.1 |
| Printing/publishing | 0.1 | 0.1 | 0.1 | 0.1 |
| Restaurants/drive-ins | 48.9 | 63.9 | 56.8 | 58.6 |
| Retail/wholesale | 6.0 | 8.0 | 9.6 | 8.2 |
| Schools | 2.8 | 1.0 | 1.2 | 1.4 |
| Services | 4.2 | 1.9 | 2.3 | 2.5 |
| Other | 4.2 | 1.4 | 1.4 | 2.0 |
| *N* = | 12,147 | 30,298 | 22,327 | 64,772 |

*Source*: Indiana Department of Workforce Development, Bureau of Child Labor.

"real world" experiences and offered opportunities to develop and improve important social and personal skills.[16]

## Youth Unemployment

The U.S. Census of 1990 found 39,439 young Hoosiers between the ages of 16 and 19 who were not high-school graduates and not enrolled in any educational program (Table 2.14). Of these, slightly more than four in ten were employed or in the armed forces, and two in ten were unemployed. A disturbing 38%, however, were neither working nor actively seeking work.[17] Current trends suggest that as many as half of the young people who dropped out prior to high-school graduation will eventually go back to school or receive equivalency certificates (GEDs). Because many will not, they will remain on the fringes of American economic and social life all their lives.

### Table 2.13 How Current Job Relates to Future Career (912 Job-Holding Respondents Only)

| | % |
|---|---|
| Doesn't relate at all | 39.0 |
| Relates directly | 17.2 |
| Teaches how to get along with people | 17.2 |
| Provides a "real world" experience | 15.6 |
| Provides opportunity to meet different people | 14.4 |
| Allows exploration/experimentation with work roles | 13.8 |
| Teaches responsibility | 12.0 |
| Teaches how to manage money | 1.6 |
| Teaches how to manage time | 1.4 |
| Provides college money | 0.5 |

*Note*: Responses exceed 100% because multiple responses were used.

*Source*: Indiana Youth Institute poll of 1,560 Indiana high-school students, 1990.

### Table 2.14 Youths Ages 16-19 Not Enrolled in School and Not High-School Graduates, Indiana and United States

| Status | Indiana (%) | United States (%) |
|---|---|---|
| Employed or in armed forces | 41.4 | 40.4 |
| Unemployed | 20.6 | 17.1 |
| Not in labor force | 38.0 | 42.5 |
| **Total %** | **100.0** | **100.0** |
| *N* = | 39,439 | 1,605,494 |
| % of 16 - 19-year-old population who are dropouts | 11.4 | 11.2 |

*Source*: U.S. Bureau of the Census, 1990.

## Notes

1. U.S. Bureau of the Census, 1990 CPH-L-80. Selected Labor Force and Commuting Characteristics, Indiana, 1990.

2. Indiana Business Research Center, *The Indiana Fact Book, 1992* (Bloomington and Indianapolis: Indiana Business Research Center, School of Business, Indiana University, 1992), p. 10. 1989 figures from Indiana State Data Center. For families with children, the picture is similar. Median income for Hoosier families averaged for the five-year period 1986-1990 was $31,811; the comparable figure for the United States was $34,705, leaving a gap of $2,894. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1992* (Washington, DC: Center for the Study of Social Policy, 1992), pp. 18, 50.

3. U.S. Bureau of the Census, Press Release, "Indiana's Economic, Social, and Housing 'Portrait' Drawn from 1990 Census Long Form," CB92-50, *U.S. Department of Commerce News*, May 27, 1992, p. 3. Similar "portraits" were drawn for Illinois, Kentucky, Michigan, and Ohio. The 1979-1989 inflation factor was 1.676.

4. U.S. Census, 1990; Indiana Business Research Center, *The Indiana Fact Book, 1992* (Bloomington and Indianapolis: Indiana Business Research Center, School of Business, Indiana University, 1992), p. 11.

5. D. Skidmore. "Income Growth trailed inflation during 1991," *The Indianapolis Star*, September 3, 1992, A-1, 2; "Growth in Average Income Trailed Inflation Rate in 1991," *The New York Times* (September 3, 1992), pp. C-1, 13.

6. U.S. Bureau of the Census, 1990 CPH-L-80. Selected Labor Force and Commuting Characteristics, Indiana, United States, 1990.

7. U.S. Bureau of the Census, 1990 CPH-L-80. Selected Labor Force and Community Characteristics, United States, Illinois, Indiana, Kentucky, Michigan, and Ohio, 1990.

8. Indiana Department of Employment and Training Services. "LMIS at Work," *Indiana Report* (Spring 1991), p. 8.

9. Employment & Training Services, Labor Market Information Services, *Indiana Labor Force Local Area Unemployment Statistics (LAUS): Annual Summary 1991* (Indianapolis: Indiana Department of Workforce Development, 1992).

10. U.S. Bureau of the Census, 1990 CPH-L-80. Selected Labor Force and Commuting Characteristics, 1990; Labor Market Information Services, "Labor Force Estimates: April 1992 (Indianapolis: Department of Workforce Development, 1992)

11. J. B. Erickson, *Indiana Youth Poll: Youths' Views of Life Beyond High School* (Indianapolis: Indiana Youth Institute, 1992), pp. 9-10. Original youth poll data were reconfigured to conform with current Indiana child labor restrictions.

12. L. B. Otto, "Extracurricular Activities," in H. J. Walberg (ed.) *Improving Educational Standards and Productivity: The Research Basis for Policy* (Berkeley, CA: McCutchan, 1982), pp. 217-227; H. Ladewig and J. K. Thomas, *Assessing the Impact of 4-H on Former Members* (College Station, TX: Texas A & M University, Cooperative Extension Service, 1987).

13. Indiana Department of Labor, *Summary of Occupational Injuries and Illnesses*, 1990, Vol. 11. (Indianapolis: Indiana Department of Labor, Research and Statistics Division, n.d. [1991]). Of the 18 fatalities to workers of all ages in retail trade establishments, eleven (61.1%) were homicides.

14. J. B. Erickson, *Indiana Youth Poll: Youths' Views of Life Beyond High School*, pp. 9-10.

15. Engrossed Senate Bill No. 192 amending IC 20-8.1-4. Passed by the Indiana General Assembly, January 1992.

16. J. B. Erickson, *Indiana Youth Poll:Youths' Views of Life Beyond High School*, pp. 11-12.

17. U.S. Bureau of the Census, 1990 CPH-L-80. Labor Force and Commuting Characteristics, Indiana, United States, 1990.

Chapter 3

# Poverty

No single factor precipitates greater compromise to the all-round healthy development of young Americans than does poverty. Although the debate over the complex issues that create poverty goes on, much is known of the impact of poverty on individuals. Being poor robs children not only of means to fulfill their basic needs for adequate food, clothing, shelter, and nurturance, but also to fulfill their dreams. Poverty affects all arenas of child and adolescent life. Being poor is particularly poignant to young people for whom media provide constant visual access to the lives of the more affluent and toward whom advertisers direct well-crafted barrages encouraging purchase of the symbols of affluence and peer acceptance.

***Being poor robs children not only of means to fulfill their basic needs but also to fulfill their dreams.***

Being poor is made even more distressing by societal attitudes that view poor people as morally deficient or lacking the will needed to pull themselves up into the middle class. Being poor flies in the face of many optimistic American values such as self-reliance and success. Because the presence of poverty is disconcerting, Americans have been willing to focus research attention on poor people. Much has been learned about them and the correlates of being poor. The final report of the National Commission on Children summarized the impact of poverty on the nation's young:

> Failure to prevent childhood poverty and address the economic needs of families leads to other social ills—more crime and delinquency, more teenage childbearing, more unhealthy babies, more failure in school, more substance abuse and mental illness, more child abuse and neglect, and lower productivity by tomorrow's labor force. These problems take a dreadful toll on the individuals directly affected, and they also impose enormous costs on society, including significant expenditures for treatment of chronic

health conditions and disabilities, special education, foster care, prisons, and welfare.[1]

There has been much less support for research to explore the complicated multiple causes of poverty or to ameliorate the conditions of poverty. As one prominent social scientist noted recently: "The only really effective solution to poverty-related behavior is the elimination of poverty itself. Scholars must use their insights and their research to cut through ideological obstacles and focus the attention of the general public and policy makers on achieving this goal."[2]

## Defining Poverty

Since 1959, poverty in the United States has been defined by the official government poverty level, set by the U.S. Office of Management and Budget. Poverty levels are a set of money-income thresholds that vary by family size and composition. Annual adjustments to the poverty levels reflect changes in the Consumer Price Index but do not take into account regional differences in cost of living or available forms of noncash benefits such as food stamps and health care. Table 3.1 presents information about

**Table 3.1 Poverty Thresholds by Size of Family**

| Size of Family Unit | 1987* $ | 1989* $ | 1992 $ | Hourly Wage Required to Reach Poverty Level $ |
|---|---|---|---|---|
| 1 | 5,778 | 6,310 | 6,810 | 3.40 |
| 2 | 7,397 | 8,076 | 9,190 | 4.60 |
| 3 | 9,056 | 9,885 | 11,570 | 5.79 |
| 4 | 11,611 | 12,674 | 13,950 | 6.98 |
| 5 | 13,737 | 14,990 | 16,330 | 8.17 |
| 6 | 15,509 | 16,921 | 18,710 | 9.36 |
| 7 | 17,649 | 19,162 | 21,090 | 10.55 |
| 8 | 19,515 | 21,328 | 23,470 | 11.74 |
| 9 | 23,105 | 25,480 | 25,850 | 12.90 |

*Weighted Average Thresholds

*Source:* Indiana State Data Center.

federal poverty levels for 1987, the year of the latest increase in Indiana AFDC benefit levels; 1989, the year for which income data were collected in the 1990 census; and for 1992, the latest year for which levels have been set. Poverty levels are used as a base for determining family eligibility for such publicly funded benefits as housing and utility subsidies, Medicaid assistance, food stamps, and free and reduced-price school lunches.

## Poverty in Indiana

Federal poverty levels represent minimums for "getting by." These income levels represent attempts to allow for the basic necessities of life but cover none of the expenditures, such as those for travel or entertainment, that broaden the worlds of the more prosperous. In 1992, the United Way of Central Indiana/Community Service Council, and Indiana Coalition for Human Services prepared a bare bones budget for a family of three (an adult and two children), "trying to maintain a decent, safe, lower-middle class lifestyle" in the Indianapolis area (Table 3.2). This budget of $17,360 includes nothing for any form of entertainment, eating out, gifts, cigarettes, cable TV, or what some might term "frivolous."[3] Furthermore, the budget assumes that low-cost housing is available; that the family has all needed appliances, furnishings, and linens; that there is no serious illness; that the family has no car payments; and that the car will require no costly repairs. The federal poverty level for such a family of three would have been $11,570 in 1992—almost one-third lower than the basic needs listed in the "decent and safe" estimated budget.

**Table 3.2 Annual Budget for Family of Three in Indianapolis**

| Category | Cost $ | Description |
|---|---|---|
| Rent | 4,800 | $400 per month - 2 bdrm |
| Utilities | 1,380 | $90 mo. gas & electric<br>$25 mo. phone |
| Food | 2,860 | $55 per week |
| Clothing | 420 | Used and discounted |
| Auto insurance | 300 | Used, older car |
| Auto repair | 250 | |
| Gasoline | 570 | Mostly job-related cost |
| Taxes | 250 | Federal, State, County |
| Health insurance | 1,800 | $150 per month |
| Doctor/medicine | 160 | |
| Personal care | 60 | Shampoo, soap, etc. |
| Household supplies/laundry | 350 | Laundromat |
| Childcare | 4,160 | $80 per week for 2 children |
| **Total** | $17,360 | **Basic budget required for healthy, safe lifestyle** |

*Source*: United Way/Community Service Council and Indiana Coalition for Human Services.

Many poor and near-poor families have one or more wage earners in the household. For several years, however, the gap between minimum wage rates and federal poverty levels has steadily increased. In 1979, a worker could be employed full-time (2000 hours annually) at the prevailing minimum wage ($2.90 hourly) and could still keep a family just above the poverty level (100.3%).[4] In 1992, although the minimum wage had increased to $4.25 per hour, a full-time worker could earn a gross minimum wage income of only $8,500, or 73.5% of the poverty level for a family of three. This same minimum wage income would reach only 49% of the "decent and safe" estimated budget of $17,360 for a family of that size. An hourly wage of $5.79 would have brought the family *gross* income to poverty level, but an hourly wage of $8.68 would have been needed to bring gross income to the "decent and safe" budget level.

## Poverty Among Individual Hoosiers

Estimates of poverty in Indiana are based on the federal poverty levels. In census years, the estimates are projections from the sample of 15% of households that completed the "long form" of the census questionnaire. In the years between censuses, estimates are based on the Current Population Survey (CPS), which includes a much smaller sample of about 60,000 households. The differences in method can lead to variance in the estimates, as was the case with the 1989 CPS and the long-form census estimates of 1989 income figures. While there is general agreement that the 1990 census undercounted the poor, the Census Bureau decided not to adjust the figures. On the other hand, the 1989 CPS report may have estimated the numbers of all poor Americans more accurately, but estimates for individual states may be off the mark. Indiana appears to be one of those states.

At best, poverty statistics are not hard data. An accurate Indiana poverty rate for children younger than age 18 in 1989 undoubtedly lies somewhere between the 17.1% estimate from the CPS study and the 13.9% estimate of the 1990 census. This report elected to use the 1990 census estimates, based on the 15% sample of Indiana incomes for 1989. In the discussion that follows, *poor* means living below the federal poverty levels. The *poverty rate* refers to the percentage of people in any group who are poor—that is, those with incomes below the federal poverty level or line.

The proportion of Hoosiers of all ages living below poverty level in 1989 was lower than that for the nation as a whole (Table 3.3). Slightly more than one in ten Hoosiers (10.7%) lived below the poverty level in 1989, compared with a little less than one in eight Americans (13.1%) across the nation. The 1989 poverty rate in Indiana was the lowest in the five-state region. Indiana tied with Wisconsin for a rank of 14 among the 50 states and the District of Columbia.[5]

**Table 3.3 Percentage of Persons Living Below the Poverty Line, 1989; United States, Indiana and Neighboring States**

| | All Persons | | | Related Children under 18 | | |
|---|---|---|---|---|---|---|
| | % | Rank* | % Change in Rate 1979-1989 | % | Rank* | % Change in Rate 1979-1989 |
| United States | 13.1 | - | 5.6 | 17.9 | - | 11.9 |
| **Indiana** | **10.7** | **14.5** | **10.3** | **13.9** | **17** | **16.8** |
| Illinois | 11.9 | 24.5 | 8.2 | 16.8 | 27 | 12.8 |
| Kentucky | 19.0 | 46.0 | 8.0 | 24.5 | 45 | 13.4 |
| Michigan | 13.1 | 32.0 | 26.0 | 18.2 | 33 | 36.8 |
| Ohio | 12.5 | 27.5 | 21.4 | 17.6 | 31 | 33.3 |

*Among 50 states and District of Columbia.

*Source*: U.S. Bureau of the Census, 1990.

The proportion of Hoosiers younger than age 18 living below poverty level was also lower than that for the nation, but the rate of change between 1979 and 1989 was higher for Indiana than for the United States as a whole (Table 3.3). About one in seven Hoosiers under age 18 (13.9%) lived below the poverty level in 1989. This proportion was below the national census figure of 17.9%. Indiana ranked 17th among the 50 states and the District of Columbia. The proportion of young Hoosiers in poverty in 1989 (13.9%) is larger than the proportion in 1979 (11.9%). This change of 17% was much larger than the 12% increase nationally. As was true for persons of all ages, the proportion of poor children in Indiana was the lowest among those in the five-state region. However, Indiana's *rate of increase* between 1979 and 1989 exceeded rates for Illinois and

Kentucky. Although rising poverty rates are not unique to Indiana, trends in the rate of increase suggest that the better position of Indiana relative to the nation may be short-lived.

Children have the highest poverty rates of all age groups in Indiana (Table 3.4). As noted above, almost 11% of Hoosiers of all ages live below the poverty level. However, the younger the children, the more likely they are to be poor. Although children younger than 18 constitute only 27% of the total population, they constitute 35% of the persons living below the poverty level. Of the children younger than five, 16.8% were poor; of the five- to 17-year-olds, 12.8% were poor. The proportion of poor children younger than 18 (13.9%) exceeded the proportion of Hoosiers ages 65 and above who were poor (10.8%).

**Table 3.4 Persons Living Below the Poverty Level by Age Group, Indiana, 1989**

| Age | % of Total Population* | % of Poverty Population | % of Age Group Living Below Poverty Level |
|---|---|---|---|
| 65 years and above | 12.1 | 12.3 | 10.8 |
| 18 - 64 years | 61.2 | 52.8 | 9.1 |
| 5 - 17 years | 19.3 | 23.3 | 12.8 |
| Under 5 years | 7.3 | 11.6 | 16.8 |
| **Total** | **99.9** | **100.0** | – |

*Based on total persons for whom poverty status was determined.

*Note*: Columns may not total 100% because of rounding.

*Source*: U.S. Bureau of the Census, 1990.

Poverty rates also vary markedly among ethnic groups (Table 3.5). An African-American child younger than 18 is nearly four times as likely to be poor as is a white child in that age group; a Hispanic child younger than 18 is about twice as likely to be poor as is a white child. Indiana's African-Americans who are younger than age 12 experience poverty rates higher than the national average. With the exception of Asian-Americans younger than age five, poverty rates for Hoosier children of other race/ethnic groups are lower than the national averages.

## Table 3.5 Persons Living Below Poverty Level by Age and Race, Indiana and United States, 1989

| Race/Ethnic Group | | Total All Ages (%) | Under 5 Years (%) | 5 Years (%) | 6 - 11 Years (%) | 12 - 17 Years (%) | 18 - 64 Years (%) | 65 - 74 Years (%) | 75 + Years (%) |
|---|---|---|---|---|---|---|---|---|---|
| All persons | Indiana | 10.7 | 16.8 | 15.8 | 14.1 | 11.8 | 9.1 | 8.7 | 14.0 |
| | U.S. | 13.1 | 20.1 | 19.7 | 18.3 | 16.3 | 11.0 | 10.4 | 16.5 |
| White | Indiana | 9.0 | 13.3 | 12.2 | 11.1 | 9.2 | 7.9 | 7.8 | 13.3 |
| | U.S. | 9.8 | 13.8 | 13.6 | 12.5 | 11.0 | 8.5 | 8.4 | 14.6 |
| African-American | Indiana | 29.0 | 46.2 | 46.7 | 39.9 | 34.1 | 23.2 | 22.5 | 26.4 |
| | U.S. | 29.5 | 44.0 | 42.8 | 39.8 | 35.5 | 23.4 | 28.6 | 37.3 |
| Native American | Indiana | 22.9 | 32.8 | 29.0 | 31.7 | 26.5 | 19.9 | 18.8 | 25.9 |
| | U.S. | 30.9 | 44.4 | 42.7 | 38.2 | 33.5 | 26.5 | 26.5 | 34.7 |
| Asian-American | Indiana | 15.0 | 19.6 | 6.4 | 8.3 | 8.5 | 16.3 | 15.1 | 15.9 |
| | U.S. | 14.1 | 17.5 | 18.0 | 17.3 | 16.3 | 13.0 | 11.3 | 13.5 |
| Other races | Indiana | 21.1 | 32.9 | 3.[illegible] | 26.5 | 24.2 | 16.8 | 17.0 | 28.7 |
| | U.S. | 28.2 | 36.8 | 37.3 | 36.0 | 33.2 | 23.9 | 25.2 | 29.9 |
| Hispanic/Latino origin* | Indiana | 17.1 | 27.1 | 23.1 | 20.7 | 18.1 | 13.9 | 15.5 | 23.7 |
| | U.S. | 25.3 | 33.4 | 33.9 | 32.6 | 30.3 | 21.3 | 21.9 | 27.8 |

*Persons of Hispanic/Latino origin may be of any race.

*Source*: U.S. Bureau of the Census, 1990.

# Poverty Among Hoosier Families

Among all families in Indiana, 7.9% live below the poverty level. The rate is nearly double—15.3%—among families with children younger than five. Among all families headed by a female, the poverty rate rises to 29.6%. Among families headed by females with children younger than five, the poverty rate soars to 55.8%. Poverty rates for Indiana's families were below the national rate and the rates for the four adjoining states in 1989 (Table 3.6). One in ten American families lives below the poverty level; the figure rises to nearly one in five (18.3%) for families with children younger than five. Nearly one in three (31.1%) American families headed by a female householder are poor, and more than one in two (57.4%) such households with children younger than five lives in poverty. In Kentucky, Michigan, and Ohio, about two out of every three families with a female householder live in poverty. Although Indiana has a relatively favorable position, given the widespread nature of poverty in the state, Hoosiers can find little satisfaction in being better off than other states.

**Table 3.6 Percent of Families Living Below the Poverty Line, 1989; United States, Indiana, and Neighboring States**

| | All Families | | | | Families with Female Householders | | | |
|---|---|---|---|---|---|---|---|---|
| | All | | With Children Under Age 5 | | All | | With Children Under Age 5 | |
| | % | Rank* | % | Rank* | % | Rank* | % | Rank* |
| United States | 10.0 | - | 18.3 | - | 31.1 | - | 57.4 | - |
| **Indiana** | **7.9** | **16.0** | **15.3** | **16** | **29.6** | **18.5** | **55.8** | **14** |
| Illinois | 9.0 | 25.5 | 17.1 | 24 | 30.7 | 26.0 | 58.6 | 28 |
| Kentucky | 16.0 | 47.5 | 25.8 | 47 | 39.6 | 44.0 | 67.7 | 47 |
| Michigan | 10.2 | 34.0 | 20.6 | 37 | 35.8 | 38.0 | 64.6 | 41 |
| Ohio | 9.7 | 29.5 | 19.3 | 34 | 33.7 | 34.0 | 63.1 | 39 |

*Among 50 states and District of Columbia

*Source*: U.S. Bureau of the Census, 1990.

Family-household poverty in Indiana is rising (Table 3.7). Although there was an increase of only 2% in the *number* of all Hoosier family households between 1980 and 1990, there was an alarming increase of 11% in the number of Hoosier families reporting incomes below the poverty level between 1979 and 1989. The number of Indiana's family households *with related children younger than 18* actually *declined* by about 4% between 1980 and 1990, but the number of poor family households with children *increased* by 13%.

**Table 3.7 Indiana Families by Type, Poverty Level and Presence and Age of Children: 1980, 1990**

| | Families Below Poverty Level | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | All Family Households | | | | | Female Head, No Spouse Present | | | | |
| | 1980 | | 1990 | | % Change 1980-1990 | 1980 | | 1990 | | % Change 1980-1990 |
| **Families** | **No.** | **%** | **No.** | **%** | | **No.** | **%** | **No.** | **%** | |
| All types | 107,415 | 7.3 | 118,225 | 7.9 | 10.1 | 46,911 | 26.8 | 62,068 | 29.6 | 32.3 |
| With related children under age 18 | 81,031 | 10.0 | 91,923 | 11.9 | 13.4 | 42,630 | 35.2 | 55,810 | 39.7 | 30.9 |
| With related children under age 6 | 47,157 | 12.9 | * | * | * | 23,984 | 49.8 | * | * | * |
| With related children under age 5 | * | * | 47,124 | 15.3 | * | * | * | 27,358 | 55.8 | * |

*The 1980 Census reported data for families with children under age 6; the 1990 Census reported information for families with children under age 5.

*Source*: U.S. Bureau of the Census.

Some of the increases in the numbers of children who are poor reflect the long-standing economic disadvantage experienced by households headed by women. Women not only continue to find it more difficult to obtain higher paying jobs, but also still earn only about 70% of what men earn for comparable work. Increased incidence of family formation without marriage, as well as marital separation and divorce, has contributed to rising numbers of households headed by females. The fastest route to poverty for women and children is the departure of the male wage earner from the home.[6]

The number of all family households in Indiana headed by females increased by about 20% during the decade between the 1980 and 1990 censuses, but the number of poor family households headed by a female increased by 32%. The income disadvantage of such households is further reflected in the 16% increase in the number of all family households headed by females with children, but a 31% increase in the number of families of this group that were poor.

## Regional Variations

***Poverty takes on different meanings in rural areas, where the range of services is narrower and access to available services is complicated by a lack of reliable transportation.***

Indiana's 92 counties vary greatly in poverty rates. Urban poverty may be more visible and thus gain more media attention, but poverty rates are as high or higher in many of Indiana's rural counties. Classification of the counties as rural (not within a Metropolitan Statistical Area and without a central city with a population of at least 10,000) and urban (all others) reveals some of these patterns. Among the 44 rural counties, poverty rates range from lows of 4.5% (Dubois) and 4.6% (Steuben), to highs of 20.6% (Crawford) and 21.9% (Scott). The range of poverty rates in the 48 urban counties is slightly lower: from 3.5% (Hamilton) and 3.6% (Hendricks) to 18.0% (Knox) and (18.2%) Lake. The median poverty rates for the two sets of counties are virtually the same: about 10.5%. Poverty takes on different meanings in rural and urban areas, however. Many rural areas lack the range of services available to families living in the state's cities; problems of access to available services are exacerbated for rural poor families without reliable transportation because of distances and the lack of public transit.

## Indiana's "Safety Net"

The assorted services available to poor and troubled families have been labeled collectively the nation's "safety net." More-affluent families are able to choose from an array of private-sector services, but poor families must rely on publicly funded benefits for their safety net. A 1988 report of The Center on Budget and Policy Priorities stated: "The safety net for poor people in Indiana is among the weakest in the nation."[7] Two years later the Indiana Legislative Services Agency reported that Indiana had one of the most fragmented service-delivery systems in the nation.[8] Recent government reorganization has, in part, addressed the fragmentation issue, but state funding levels for social supports for families with children remain low.

## Assistance to Families with Dependent Children (AFDC)

The primary cash-income program for subsidizing the nation's poor families is Assistance to Families with Dependent Children (AFDC). The program has gone through many changes since its origins in the "mothers' pensions" first granted in the early 1900s. In the early decades, public support for children was justified on the grounds that this income kept children out of institutions by allowing their mothers to stay at home and raise them. As more women entered the labor force, changing attitudes prompted rethinking about family income support. Various state and local programs designed to "get women off welfare" are being tried across the nation. The federal Family Support Act of 1988, the enabling legislation for the AFDC program, also created AFDC-IMPACT, a program that targets individuals with multiple barriers to employment. Implementation of AFDC-IMPACT, delayed in several Indiana counties for budgetary reasons, will ultimately provide extensive services to individuals with less than a high-school education and/or other significant life circumstances that keep them out of the workforce.[9]

Nearly two of every three AFDC assistance dollars granted to Indiana families come from federal sources. Thus, for every 37 cents that the state spends on AFDC, an additional 63 cents in new federal funds go into local economies. The number of Hoosier families applying for AFDC benefits has risen rapidly for three years, nearly overwhelming already overextended county welfare caseworkers, who must review each application and determine whether the family meets eligibility criteria.

***The number of Hoosier families applying for AFDC benefits has risen rapidly for three years, nearly overwhelming already overextended county welfare caseworkers.***

Although the enabling legislation for AFDC is federal, each state sets a "standard of need," based on family size. For an Indiana family of four, the standard is $385 per month. This standard is lower than that set by 48 other states in the nation in FY 1991 and FY 1992. To qualify for AFDC in Indiana, a family cannot have a *gross* income in excess of 185% of the standard, or $712 per month. Meeting this criterion does not guarantee the family eligibility, however. The Indiana State Legislature has set a 10% "rateable reduction" by which the standard of need is reduced, bringing the maximum legal payment down to $346 per month ($4,152 per year) for a family of four. A family cannot have *net* income that exceeds the amount of the maximum legal payment, nor can a family have total assets valued in excess of $1000. They must also supply Social Security numbers, meet state residency and citizenship/alien requirements, and cooperate with the Child Support Enforcement Program. Finally, family members who do not meet exemption criteria must register for the Employment and Training Program. Having passed all these hurdles, the family of four may qualify for a monthly payment of $346, or 29.8% of the poverty level in 1992. Even though families that qualify for AFDC are also eligible to receive food stamps, medical assistance, and free school lunches, these benefits do not bring family income up to the federal poverty level. (These other assistance programs are discussed elsewhere in this chapter and Chapter 10.)

The average monthly AFDC payment for Indiana families of all sizes was $264.36 in 1991, the latest year for which comparable national data are available. For the United States, the average AFDC payment per family was $389.35 in 1991. Indiana's rank dropped to 40th in 1991, down from 37th the previous year (Table 3.8). Indiana's *average monthly* AFDC payment actually declined slightly in FY 1992, to $260.59.[10] Indiana has not changed family benefit levels since 1987. Table 3.9 compares AFDC payments for families of four in Indiana with those in neighboring states.

**Table 3.8 Aid to Families with Dependent Children: Average Payment per Family, Excluding Medical Care, FY 1988 - FY 1990; United States, Indiana, and Neighboring States**

| | FY 1988 | | FY 1989 | | FY 1990 | |
|---|---|---|---|---|---|---|
| | Payment ($) | Rank* | Payment ($) | Rank* | Payment ($) | Rank* |
| United States | 368.63 | - | 366.96 | - | 375.51 | - |
| **Indiana** | **263.20** | **35** | **262.92** | **37** | **263.79** | **37** |
| Illinois | 303.63 | 28 | 304.20 | 28 | 329.20 | 24 |
| Kentucky | 204.15 | 44 | 219.67 | 44 | 224.54 | 44 |
| Michigan | 461.34 | 9 | 450.94 | 10 | 452.78 | 10 |
| Ohio | 309.95 | 27 | 310.59 | 27 | 322.80 | 27 |

*Among 50 states and District of Columbia

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991.

Not only is Indiana's maximum legal payment next to the lowest for the five states, but Indiana is the only state of the five that has not made an adjustment upward in the past three fiscal years. The purchasing power of combined AFDC payments and food stamps has eroded steadily, relative to the poverty level. In 1992, combined maximum benefits in both programs would have brought a family of four to 61% of the poverty level; the same benefits in 1982 would have reached 66% of the poverty level.

**Table 3.9 Aid to Families with Dependent Children: Maximum Legal Payment for Family of Four, FY 1989 - FY 1992; United States, Indiana and Neighboring States**

| | As of 1/1/89 ($) | As of 1/1/90 ($) | As of 1/1/91 ($) | As of 1/1/92 ($) |
|---|---|---|---|---|
| U.S. average | 439 | 449 | 467 | 460 |
| **Indiana** | **346** | **346** | **346** | **346** |
| Illinois | 386 | 414 | 414 | 414 |
| Kentucky | 272 | 285 | 285 | 285 |
| Michigan | 563 | 571 | 571 | 563 |
| Ohio | 397 | 397 | 413 | 413 |

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

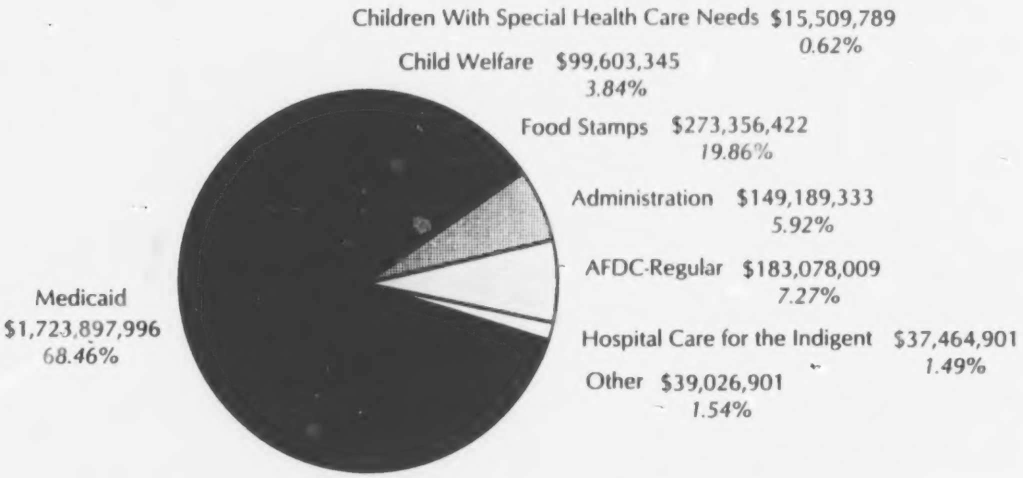
## AFDC recipients

The typical family receiving AFDC benefits consists of a mother and two children. Such a family of three can receive AFDC payments of no more than $288 per month ($3,456 per year). Contrary to myth, families receiving AFDC are not particularly large: In FY 1992, 44% had only one child; another 47% had two or three children. Only 8% had four or five children, and only 1% had six or more children.[11] Fewer than 1% of the mothers who are heads of household are younger than age 18. There is no evidence to support the perception that most families are "on AFDC" for a generation or more. Typically, families receive AFDC payments for fewer than three years.

On average, 208,209 persons per month received AFDC benefits in Indiana during Fiscal Year 1992. Of this number 140,619, or 67%, were children. This figure represents nearly 10% of all children younger than 18 in the state of Indiana, up from about 7% of all children in FY 1990.[12] Average monthly AFDC *caseloads* for the state increased 15% between FY 1991 and FY 1992. This increase followed an average monthly caseload increase of 14% between FY 1990 and FY 1991, and a 3% increase between FY 1989 and 1990.

The cost of the regular AFDC program in Indiana was $202.4 million in FY 1992, up from $183.1 million in FY 1991. This figure, while large, represented less than 7% of Indiana's total welfare expenditures in FY 1992. Figure 3.1 depicts the Indiana State Department of Public Welfare expenditures for FY 1991.

**Figure 3.1 Expenditures for Welfare in Indiana During FY 1991**



*Source*: Indiana Department of Public Welfare, FY 1991.

BEST COPY AVAILABLE

# Food Stamps

The Food Stamp Program, a second component of the federal "safety net," is designed to raise the nutritional level of low-income households by supplementing their food purchasing dollars. Federal regulations governing the program are developed by the U.S. Department of Agriculture and administered through each state. In Indiana, applications are filed through one of the 92 county Human Service Department offices. As with AFDC, eligibility criteria are complex and include both financial and nonfinancial elements. The latter involve county-residence requirements, citizenship/alien status, and work registration. Financial criteria are based on monthly net income and household size; financial criteria are not as stringent as those for AFDC. Food stamps may be used at any retailer federally approved to receive food stamps, but may be applied only to the purchase of food items. The federal government pays the *entire* cost of food stamp benefits, as well as half the costs incurred for administering the program.

***The federal government pays the entire cost of food stamp benefits, as well as half the costs incurred for administering the program.***

Unlike AFDC, where benefit levels are set by the states and change only periodically, food stamp benefits are based on a "thrifty food plan" budget, adjusted annually to take price changes into account. Throughout the 1980s, the maximum payment rose from 4- to 6% annually. For the first time in many years, food stamp payments could have declined slightly beginning October 1, 1992; however, in an election year, Congress enacted special legislation to keep the payments at the same level as in the previous year.

## Recipients of food stamps

During FY 1992, an average of 431,039 Hoosiers received food stamp benefits monthly, a 21% increase over the average number participating in FY 1991. Only 35% were also AFDC recipients in FY 1992, essentially unchanged from the previous year. Based on a July 1992 count of 461,340 food stamp recipients, costs of the program are expected to exceed $350 million for the 1992 *calendar* year. Although the proportion of Hoosiers receiving food stamps remains below the national average, the figure has risen from 5% at the end of FY 1989 to 8% at the end of FY 1992. Nationally, food stamp supplements are being received by more than 10% of the population.

Table 3.10 presents information about Indiana's AFDC standards of need, maximum legal AFDC payments, and maximum food stamp benefits for families of different sizes. The value of AFDC payments in Indiana, relative to the poverty level, continues to decline annually. In 1987, when the maximum legal payment for a family of three went up to $288 per month, for example, that amount represented 38.2% of the poverty level. In 1992, $288 per month represented 29.9% of the poverty level.

**Table 3.10 Indiana AFDC and Food Stamp Benefits by Family Size, FY 1992**

| Family Size | Standard of Need | Maximum AFDC Payment ($) | Maximum Food Stamp Benefit ($) | Combined Benefits as % of Poverty Level |
|---|---|---|---|---|
| 1 | 155.00 | 139.50 | 111.00 | 44.1 |
| 2 | 255.00 | 229.50 | 203.00 | 56.5 |
| 3 | 320.00 | 288.00 | 292.00 | 60.2 |
| 4 | 385.00 | 346.00 | 370.00 | 61.6 |
| 5 | 450.00 | 405.00 | 440.00 | 62.1 |
| 6 | 515.00 | 463.50 | 528.00 | 63.6 |
| 7 | 580.00 | 522.00 | 584.00 | 62.9 |
| 8 | 645.00 | 580.50 | 667.00 | 63.8 |
| 9 | 710.00 | 639.00 | 750.00 | 64.6 |
| 10 | 775.00 | 697.50 | 833.00 | 65.2 |
| Each additional person | 65.00 | 58.50 | 83.00 | – |

*Source*: Indiana Family and Social Services Administration.

As noted previously, only one in three food stamp recipients also receives AFDC benefits. Food stamps supplement budgets in many households with fixed retirement incomes. They are also used in many households where adults work at jobs paying low or minimum wages. In 1964, a fully employed worker (2,000 hours annually) receiving the minimum wage (then set at $1.25 per hour) could earn 103.6% of the federal poverty level. When the minimum hourly wage was raised to $1.60 in 1969, full-time work brought in an income that was 109.4% of the poverty level. The $2.90 minimum hourly wage could still keep a family just above poverty level (100.3%). Since this time, however, minimum-wage earnings as a percentage of the poverty level have fallen dramatically. In 1989, for example, minimum-wage earnings were two-thirds of the poverty level for a family of three. In spite of the 1991 raise in minimum hourly wage to $4.25, a fully-employed worker could still earn only 73.5% of the poverty level in 1992. It would take an hourly wage of $5.79 to reach the 1992 poverty level for a family of three.

## Free and reduced-price school lunch and breakfast

*Lunch.* Another feature of the safety net available to poor and low-income families is eligibility for free and reduced-price lunches and breakfasts for school children. These programs are supported by the U.S. Department of Agriculture. Only one school corporation in Indiana—Speedway—does not participate in the school lunch program.

Children from families with household incomes less than 130% of the federal poverty level (equal to $18,135 for a family of four in 1992) are eligible for free meals. Children from families with incomes less than 185% of the poverty level ($25,807 for a family of four) are eligible for reduced-price lunches. Program administrators estimate that most eligible families participate in the free lunch programs, at least at the elementary through junior-high-school levels, but that the number of families participating in the reduced-price program is significantly fewer than the number eligible. Therefore, only participation figures for the free school-lunch program are reported here.

**Three in four Indiana school corporations do not participate in the breakfast program—one of the lowest participation rates for low-income students in the nation.**

During the 1991-1992 school year, 21.5% of Indiana's public school children received free lunches at school. In just one year, the percentage rose 15.9%, from 1990-1991, when 18.6% received free lunches.[13] Figures for the 1992-1993 school year were not available when this report was written, but another substantial rise in participation is anticipated. While rates of participation in free lunch programs cannot by themselves denote the extent of poverty, the increase in participation is further indication of rising economic distress among Hoosier families.

*Breakfast.* Although there is nearly total participation throughout Indiana's schools in the free lunch programs, three in four of the state's school corporations *do not* participate in the breakfast program. Indiana has one of the lowest participation rates for low-income students in the nation.[14] The same family income criteria that apply to the school lunch

**Table 3.11 Percentage of Indiana Population Receiving AFDC and Food Stamp Assistance, 1989, 1990, 1991, 1992**

| | Indiana (%) | U.S. Average (%) |
|---|---|---|
| **AFDC Assistance** | | |
| June 1989 | 2.6 | 4.0 |
| June 1990 | 2.8 | 4.0 |
| June 1991 | 3.1 | 4.3 |
| June 1992 | 3.4 | 4.9 |
| **Food Stamps** | | |
| June 1989 | 5.1 | 7.8 |
| June 1990 | 5.7 | 7.5 |
| June 1991 | 7.0 | 8.0 |
| June 1992 | 8.2 | 9.0 |

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

**Table 3.12 Indiana Households Receiving AFDC and Food Stamps, by Ethnic Group, FY 1992**

| | AFDC (%) | Food Stamps (%) |
|---|---|---|
| White | 56.2 | 67.1 |
| African-American | 38.9 | 30.0 |
| Native American | - | 0.1 |
| Asian-American | - | 0.2 |
| Hispanic/Latino origin* | 2.5 | 2.6 |
| Other | 2.4 | - |
| **Total** | **100.0** | **100.0** |

*Persons of Hispanic/Latino origin may be of any race.

*Source*: Indiana Family and Social Services Administration, Annual Report, FY 1992.

program determine eligibility for free or reduced-price breakfasts. This means that about one in five Hoosiers of school age could benefit from the program. In addition, if widely adopted, subsidies for school breakfasts could bring some $3 million in federal funds to Indiana.

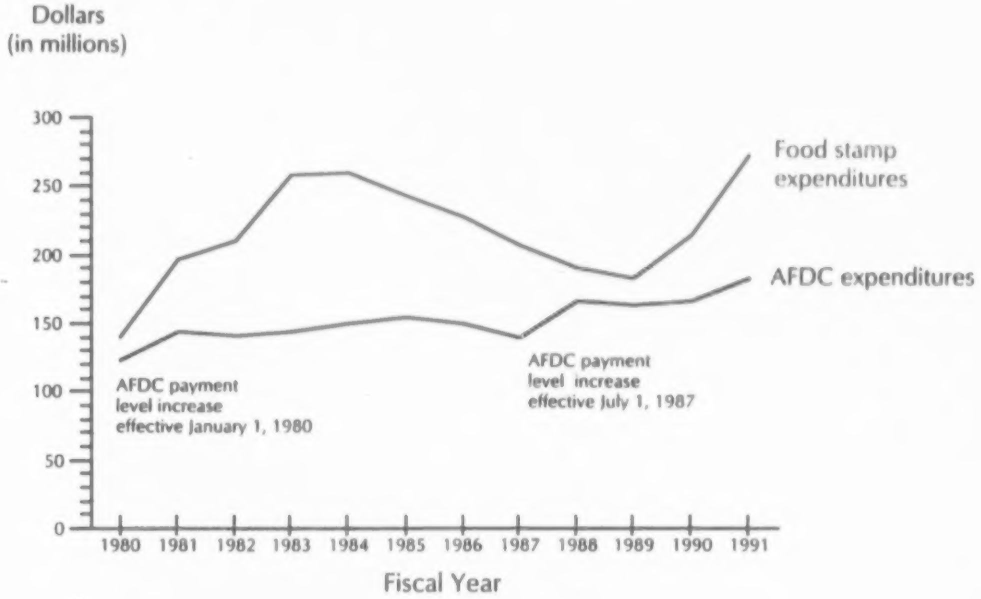
## Growing Use of Safety-Net Programs

Falling income levels have led Hoosiers to greater reliance on publicly funded safety-net programs for personal and family survival. Although a smaller proportion of Hoosiers than all Americans has received AFDC and food stamp benefits in recent years, the gap is closing as poverty continues to rise in Indiana. At the end of FY 1992, 3.4% of all Hoosiers (compared with 4.9% nationally) were receiving AFDC assistance, up from 3.1% in FY 1991. There was an even greater increase in the use of food stamps: 8.2% at the end of FY 1992 (compared with 9.0% nationally), up from 7.0% in FY 1991 (Table 3.11). The distribution of households receiving AFDC and food stamp benefits by ethnic group reflects the higher poverty rates among families of color (Table 3.12).

## Growing Costs of Safety-Net Programs

The costs of both AFDC and Food Stamp Programs have risen each year since FY 1990 (Figure 3.2). In just the past year, the cost of food stamps issued rose nearly 30%, from $273.4 million (FY 1991) to $354.6 million (FY 1992). In the same period, total AFDC payments rose more than 10%, from $183.1 million to $202.4 million. The federal share of benefit payments brought $484.1 million into the state's economy in FY 1992—more than the earnings of the entire mining industry of Indiana. Each of these federal dollars circulates and boosts purchasing power in local economies, as well as in the state as a whole.

**Figure 3.2 Annual Expenditures For AFDC and Food Stamps in Indiana, FY 1980 - FY 1991**



*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991.

## Hunger in Indiana

Hunger is one of the most enervating accompaniments to poverty. In March 1991, the Food Research and Action Center released information from the Community Childhood Hunger Identification Project (CCHIP). This study involved a random sample of 2,335 families living below 185% of the poverty level from seven areas of the United States. The study projected findings from the sample and estimated that 5.5 million American children younger than age 12 (about 12%) are hungry. An additional 6 million (14.0%) in this age group are at risk of hunger.

The initial CCHIP study did not include families in Indiana, but used their base findings to make projections for the state. The CCHIP study estimated that some 12% of the state's children younger than age 12 were actually hungry and that an additional 13% were at risk of hunger. These estimates are not out of line with the figures for Indiana's children living below or near poverty level.[15] They are also consistent with growing use of food stamps and the school lunch programs, as well as private sector efforts such as food banks. The Indiana Food and Nutrition Network has begun a study among Hoosier households that will provide a more accurate picture of hunger in Indiana than did the projections from the national research findings.

## Notes

1. The National Commission on Children, *Beyond Rhetoric: A New American Agenda for Children and Families* (Washington, DC: U.S. Government Printing Office, 1991), p. xx.

2. H. J. Gans. "Fighting the Biases Embedded in Social Concepts of the Poor." *The Chronicle of Higher Education*, 38, 18 (January 8, 1992), p. A56.

3. United Way of Central Indiana/Community Service Council, and Indiana Coalition for Human Services, *Moving Forward: Investing in Indiana's Human Resources* (Indianapolis: United Way of Central Indiana/ Community Service Council, and Indiana Coalition for Human Services, October 1992), p. 7.

4. Indiana Legislative Services Agency, *Families in Poverty - Evaluation Audit: Senior Citizens, The Disabled, and Children in Indiana* (Indianapolis: Indiana Legislative Services Agency, June 1990), p. 81.

5. In 1992, the Census Bureau released income information from the 1991 CPS report (based on a sample of about 60,000 U.S. households). Recessionary trends continued around the nation. Median household income, after adjustment for inflation, declined 3.5% from 1990, and more than 2,000,000 more Americans were living below the poverty line than in the previous year. The poverty rate for the nation as a whole was 14.2% in 1991, up from 13.5% in 1990, and 12.8% in 1989. Nationally, children under 18 had the highest poverty rate, 21.8%. The rate was 11.4% for individuals 18 to 64, and 12.4% for persons 65 and over. Forty percent of America's poor were children under age 18.

Income declined for persons and households of all ethnic groups, while the overall relative positions among groups remained basically the same. For white persons, the poverty rate rose to 11.3%; for African-Americans, to

32.7%; for Asian-Americans, to 13.8%; and for persons of Hispanic origin, to 28.7%.

The data for Indiana are based on a small sample of households, making the figures subject to a fairly large margin of error (about plus or minus 2 percentage points). The CPS report indicated that 15.7% of Hoosiers were living below the poverty line in 1991, up from 13.0% in 1990. Of the five states, only Kentucky had a higher poverty rate (18.8%). For the other states, the figures were Illinois, 13.5%; Michigan, 14.1%, and Ohio, 13.4%. Median household income in Indiana fell 3.5% between 1990 and 1991.

6. S. Bianchi and E. McArthur, *Family Disruption and Economic Hardship: The Short-Run Picture for Children*, Current Population Reports, Household Economic Studies Series P-70, No. 23 (Washington, DC: U.S. Department of Commerce, Bureau of the Census, January 1991).

7. I. Shapiro and R. Greenstein, *Indiana - Holes in the Safety Nets: Poverty Programs and Policies in the States: A State Analysis* (Washington, DC: Center on Budget and Policy Priorities, 1988), p. 1.

8. Legislative Services Agency, *Families in Poverty Evaluation Audit*, p. 81.

9. *Public Welfare Fast Facts*. "AFDC-IMPACT, Food Stamps-IMPACT" (Indianapolis: Department of Public Welfare, Public Information Division, October 1991).

10. Division of Family and Children, Indiana Family and Social Services Administration, *Fiscal Year 1992 Annual Report* (Indianapolis: Indiana Family and Social Services Administration, 1992), pp. 17, 37.

11. Division of Family and Children, *Fiscal Year 1992 Annual Report*, p. 33.

12. Both percentages based on 1990 census data.

13. Indiana Department of Education, School Food and Nutrition Division, 1992.

14. N.a. "The Continuing Saga of School Breakfast," *Network News* (February 1992), p. 1; D. Mesce. "Many pupils missing free breakfasts," *Indianapolis Star* (1992), p. A-6.

15. Food Research and Action Center, *Community Childhood Hunger Identification Project: A Survey of Childhood Hunger in the United States: Executive Summary* (Washington, DC: Food Research and Action Center, 1991); Food Research and Action Center, "Methodology for Calculation of State-by-State Hunger and At-Risk Estimates" (Washington, DC: Food Research and Action Center, March 1991).

## Building a Humane Environment

All children will have access to a physically safe environment, free from abuse, neglect, exploitation, and other forms of violence. They will have adequate housing and living conditions; safe neighborhoods; clean air, food, and water. Their environment will be free from toxins, drugs, alcohol, and tobacco. All children will have an opportunity to learn how to protect their environment for the future.

Indiana Youth Institute
from *10 Blueprints for Healthy Development*

*More than 60,000 reports of abuse and neglect were investigated in 1991. Investigation substantiated or indicated that abuse and/or neglect had occurred in slightly more than half of the reported cases. Reported cases continue to underrepresent the actual rates of abuse and neglect.*

BEST COPY AVAILABLE

# *Highlights*

*Indiana continues to permit corporal punishment of children in schools, state-licensed group homes and child-caring institutions, and foster homes. The state does not permit the corporal punishment of adult prisoners or persons in mental institutions.*

*In spite of recent changes, Indiana's child welfare system as a whole is simply overwhelmed by current case levels. There is high job turnover among the state's welfare caseworkers, who remain among the most poorly paid in the nation.*

*Abuse and neglect cross all boundaries—geographic, racial, ethnic, religious, and socio-economic. Eight in 10 perpetrators of abuse and neglect are white.*

*Natural parents were the perpetrators of more than eight in 10 cases of neglect, and about half the cases of abuse.*

# Abuse and Neglect Introduction

All children should have access to a physically safe environment, free from abuse, neglect, exploitation, and other forms of violence. They should have adequate housing and living conditions; safe neighborhoods; clean air, food and water, and they should experience love and care of parents and other significant adults. For growing numbers of young Hoosiers, these are unfulfilled hopes.

For about two decades, Americans have been paying renewed attention to the abuse and neglect of children and adolescents. The maltreatment of young people is not a new phenomenon, but as understanding has grown of the complex connections among childhood mistreatment and developmental delays, educational and mental health problems, and ultimately, adult violence, broader legal safeguards for children have been initiated.

In 1974, the federal Child Abuse Prevention and Treatment Act (PL 93-237) defined child abuse as "the physical or mental injury, sexual abuse, negligent treatment, or maltreatment of a child under the age of eighteen by a person who is responsible for the child's welfare under circumstances which would indicate that the child's health or welfare is harmed or threatened thereby."[1]

Since the passage of this law, reporting requirements have become more stringent, and definitions of abuse and neglect more refined (see box for definitions of the four distinct types of maltreatment recognized by the National Committee for Prevention of Child Abuse).

### Definitions of Child Abuse and Neglect

Indiana Family Law (IC-31-6-11) defines child abuse or neglect as a situation in which a child is alleged in need of services because

- the child is under age 18 and
- his physical or mental condition is seriously impaired or seriously endangered as a result of the inability, refusal or neglect of his parent, guardian or custodian to supply the child with necessary food, clothing, shelter, medical care, education or supervision, or
- his physical or mental health is seriously endangered due to injury by act or omission of his parent, guardian, or custodian, or
- he is the victim of a sex offense as defined by criminal law citations or
- he is allowed to participate in an obscene performance or he is allowed to commit a sex offense and needs care, treatment or rehabilitation that he is not receiving, and that is unlikely to be provided or accepted without the coercive intervention of the court.

The National Committee for Prevention of Child Abuse recognizes four distinct types of child maltreatment. *Physical abuse* is non-accidental injury to a child by an adult caretaker. By definition, the injury is not an accident. Neither is it necessarily the intent of the child's caretaker to injure the child. Physical abuse may result from severe corporal punishment or from punishment which is inappropriate to the child's age or condition.

*Neglect* is the failure of the child's caretaker to provide the basic needs of a child. These needs include food, clothing, shelter, medical care, and supervision. While physical abuse tends to be episodic, neglect tends to be chronic. Care of children necessarily evolves around cultural norms. However, all children have basic needs which must be met by their caretakers regardless of cultural norms. If these needs are not being met and the children's caretaker cannot or will not accept offered assistance, then the child can be considered as neglected.

*Sexual abuse* includes any contact or interaction between a child and an adult in which the child is being used for the sexual stimulation of the perpetrator or another person. Sexual abuse may also be committed by a person under the age of 18 when that person is either significantly older than the victim or when the perpetrator is in a position of power or control over another child. The contact between victim and perpetrator may be a specific physical contact such as fondling, genital manipulation, oral sex, or genital or anal intercourse. The contact may also be of non-touching nature, such as prostitution, pornography, verbal or visual stimulation, or voyerurism.

*Emotional maltreatment* is the fourth type of child maltreatment. It is more difficult to define than physical abuse or neglect, but the effects can be devastating to the child. There are two types of emotional maltreatment. Emotional neglect (an act of omission) is a chronic failure by the caretaker to provide the child with the support and affection necessary to development of a sound and healthy personality. Emotional abuse (an act of commission) is a chronic attitude or acts of a caretaker which are detrimental to the child's development of a sound and healthy personality. Examples of emotional maltreatment are rejecting, ignoring, terrorizing, isolating and corrupting.

*Source*: Indiana State Plan for the Prevention of Abuse and Neglect, 1992.

Recognition of a growing crisis has brought responses at state and local levels throughout the nation. The Indiana legislature created the Child Abuse Prevention Council in 1985; the council makes recommendations for awarding contracts for the purchase of primary or secondary child abuse prevention services. Acknowledging the growing need for such services, the Council requested that the Indiana Chapter for Prevention of Child Abuse[2] create a comprehensive plan for preventing child abuse and neglect in Indiana. This plan was introduced in 1992.[3] Also in 1992, the Indiana legislature established a bipartisan Commission on Abused and Neglected Children and their Families. After several months of intense work, the Commission submitted its report to Governor Evan Bayh. The Commission concluded that Indiana is in need of a continuum of child welfare services, including stepped-up prevention efforts in Hoosier communities, more-effective intervention strategies within the Indiana Division of Family and Children, and better evaluation and accountability processes. The Commission report points out that underfunded systems do not, in the long run, conserve state resources:

> We can begin now to pay for a child protection system that responds to the current emergency, or we can continue to pay at increasing costs for poor school performance, increasing out-of-home care for disturbed children and adolescents, deficient workforce participation, increased incarceration in correctional facilities, and a perpetuating cycle of generations of abuse and neglect.[4]

## Data Sources

Most of the information reported in this chapter came from the Annual Reports for fiscal years 1989 through 1992 of the Indiana Family and Social Services Administration (formerly, the Indiana Department of Public Welfare). Additional sources include the Indiana Chapter, Committee for Prevention of Child Abuse, the Indiana State Plan for the Prevention of Child Abuse and Neglect, and the Commission on Abused and Neglected Children and their Families. The Commission found that Indiana's overburdened child protection system is in great need of better accountability and record-keeping strategies at all points. The chronic high turnover among caseworkers results in frequent case transfers, and, in the absence of automated record keeping systems, vital information is often lost. The Commission recommended immediate implementation of the I-CARES automated case-management system as a vital first step.[5]

The I-CARES system would bring into one secure information system, the separate "registries" that now exist in each of Indiana's 92 counties. Many of the county databases are, in reality, boxes of index cards. Confidentiality standards for protecting the information contained in these files varies from county to county.

## Challenges:

- Continuing to improve the quality and consistency of data collection from one county to the next, including standardizing responses to first calls received by county offices.
- Implementing Commission recommendations for improved recording and reporting; bringing the I-CARES automated system into operation in every county.
- Developing a statewide data base of individuals known to have maltreated children.
- Gaining a better understanding of the long-term consequences of child maltreatment.
- Developing better ways of communicating information about child maltreatment so as to overcome the common misunderstandings among Indiana's citizens that can present barriers to system reform.
- Linking data on family socioeconomic status, and concurrent family economic and social stresses with incidents of abuse and neglect reports.
- Developing better strategies for sharing information among service providers while maintaining high standards of confidentiality.
- Evaluating the impact of prevention strategies, including periodic follow-up to determine long-term costs and benefits of various types of programs.
- Evaluating family-preservation service outcomes and costs, including periodic follow-up to determine long-term costs, benefits, and consequences of various types of interventions.
- Recording information about sources of unsubstantiated reports so that if patterns emerge, better, more focussed training efforts may be initiated.

## Notes:

1. Cited in R. J. Gelles,. "What to Learn from Cross-cultural and Historical Research on Child Abuse and Neglect: An Overview." In R. J. Gelles and J. B. Lancaster (eds.). *Child Abuse and Neglect: Biosocial Dimensions* (New York: Aldine de Gruyter, Inc., 1987), p. 19.

2. The official name of the organization is Prevention of Child Abuse: Indiana Chapter of the National Committee. For brevity's sake in this report, we have, with the organization's permission, referred to this group as the Indiana Chapter for Prevention of Child Abuse.

3. Prevention of Child Abuse: Indiana Chapter of the National Committee, *Indiana State Plan for the Prevention of Child Abuse and Neglect* (Indianapolis: Indiana Child Abuse Prevention Council, 1992).

4. Commission on Abused and Neglected Children and their Families, *Child Abuse and Neglect: Indiana's Emergency* (Indianapolis: Commission on Abused and Neglected Children and their Families, December 1992), p. 5.

5. Commission on Abused and Neglected Families and their Children, *Child Abuse and Neglect: Indiana's Emergency*, pp. 4, 9-11.

Chapter 4

# Child Abuse and Neglect

## Measuring Abuse and Neglect

Gathering accurate and comprehensive data on child abuse and neglect is a task fraught with difficulties. Abuse and neglect statistics are compiled at the time a report is made and investigation of the allegation begins (reported cases). Additional statistics classifying findings are compiled following investigation. Variations in state law and local custom complicate the formation of a nationally standardized approach to gathering data about child abuse and neglect. Existing data cannot reveal with certainty what is causing the soaring numbers of cases coming to the attention of child protective services. Do these numbers reflect a true increase in maltreatment, changes in legal definitions of what constitutes reportable abuse and neglect, or an increase in willingness to report suspected instances? While unequivocal answers will continue to be elusive until a more comprehensive and uniform system for compiling national data is in place, present information suggests that all of these factors have contributed to rising rates.

***While abuse and neglect are found in all socio-economic circumstances, worry about jobs, unemployment, and/or poverty exacerbate family stress and increase the likelihood that maltreatment will occur.***

Abuse (much of it increasingly brutal)[1] and neglect cross all boundaries—geographic, racial, ethnic, religious, and socioeconomic—in Indiana as well as in the nation. Each reported case is handled individually, but patterns in the underlying circumstances have emerged. While abuse and neglect are found in all socioeconomic circumstances, worry about jobs, unemployment, and/or poverty exacerbate family stress and increase the likelihood that maltreatment will occur. Other factors associated with abuse and neglect include isolation, immaturity, unrealistic expectations for children, and lack of skills among parents. Also, parents' own unmet emotional needs or actual mental illness or developmental delays may inhibit understanding and carrying out parental responsibilities. Growing substance abuse among care givers has taken its toll, as well.[2] Finally, the general rise in violence in American society as a way of handling conflict plays a part.[3] The National Committee for Prevention of Child Abuse (NCPCA) believes that in spite of the increase in identified cases, mistreatment remains substantially underreported. The best available estimates for national trends in maltreatment come from the NCPCA annual survey.

## National Trends

***"If we don't deal with the adolescents as victims, we will ultimately have to deal with large numbers of them as perpetrators."***

National Committee for Prevention of Child Abuse surveys reveal a steady growth of about 6% annually in child abuse reports since 1985—about half the 11% average annual rate of increase reported during the early years of the decade. Reports of maltreatment reached 2.6 million in 1991, involving 42 of every 1000 American children under the age of 18. Nationally, child abuse fatalities rose 10% between 1990 and 1991. During the period 1985 through 1991, fatalities increased by 54%. Of these, four in ten resulted from neglect; six in ten were the result of physical abuse. In 1991, more than three-fourths (78%) of the victims were children younger than age five.[4]

While most fatalities resulting from maltreatment occur among young children, a 1986 survey by the National Center on Child Abuse and Neglect found that rates of abuse were actually about 50% higher for youths ages 12-17 than for those younger than age 12. Moderate injury rates were generally higher among adolescents. Adolescent abuse is compounded by the fact that teens often react to maltreatment in ways that multiply health risks. For example, they may engage in increased sexual activity or increased use of alcohol or other drugs. Some run away and join the ranks of the homeless.[5] Although most abuse victims do not become perpetrators, having been a victim of abuse does substantially increase that risk. James Garbarino, nationally recognized expert in the field of abuse prevention and treatment, stated recently: "If we don't deal with the adolescents as victims, we will ultimately have to deal with large numbers of them as perpetrators."[6]

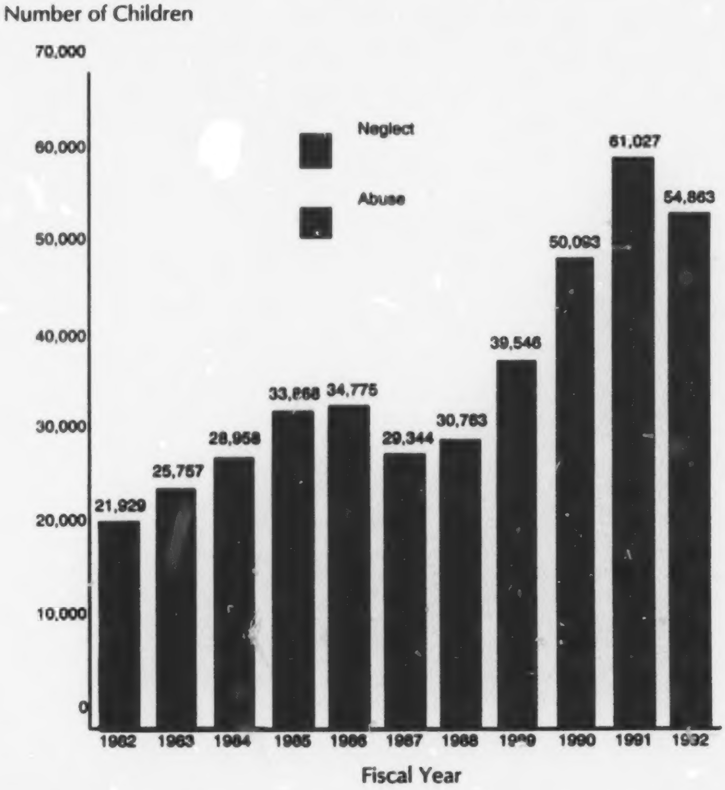
Child abuse and neglect is a national crisis that not only affects young victims here and now but also has consequences that will reverberate throughout our social structure today and for years to come. Child abuse and neglect will not go away until our collective national will is organized into action and deployed with the same vigor that Americans have used to attack and overcome other threats to our well-being.

## Trends in Indiana

### Reports of abuse and neglect

In 1991, the rate of *reported* child abuse and neglect in Indiana was 41.9 per 1000 children younger than age 18—the same as the estimated national average. Indiana has experienced an alarming 178% increase in reports of maltreatment during the ten years from Fiscal Year 1982 through FY 1991. The pattern of annual change in Indiana has fluctuated, however (Figure 4.1). The number of reported cases increased from FY 1984 to FY 1986, then fell in FY 1987. This decline was followed by a steady annual rise through FY 1991. The break in the upward pattern in 1987 is most likely a consequence of disruptions attending the shift of child welfare services from county to state control that year, rather than a true reduction in incidence of maltreatment. In FY 1992, there were 54,863 reported cases of abuse and neglect (25,958 cases of abuse and 28,905 cases of neglect), a 10% decline from FY 1991.[7] While encouraging, recent history shows that a one-year decline may not indicate the beginning of a trend.

**Figure 4.1 Reports of Abuse and Neglect in Indiana, FY 1982 - FY 1992**



*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

BEST COPY AVAILABLE

## Sources of reports

Initial reports of substantiated and indicated cases of abuse and neglect have come from a variety of sources. Table 4.1 shows sources of reports in FY 1991. In FY 1992, judicial and social agencies accounted for 26% of the reports; schools and substitute caretakers, another 22%. Family members reported 21% of the cases, while medical personnel (11%), and friends, neighbors and landlords (9%) also made reports. Other sources accounted for 3% of the reports. Only 8% of the cases were reported anonymously.[8]

**Table 4.1 Sources of Initial Reports of Child Abuse and Neglect in Indiana FY 1991 (Substantiated and Indicated Cases)**

| | Abuse % | Neglect % | Total % |
|---|---|---|---|
| Judicial/social agency | 12.1 | 14.3 | 26.4 |
| School/substitute caretaker | 12.8 | 10.2 | 23.0 |
| Family/relative | 8.8 | 11.0 | 19.8 |
| Medical personnel | 5.2 | 5.6 | 10.8 |
| Friend/neighbor/landlord | 7.4 | 1.9 | 9.3 |
| Anonymous | 5.8 | 1.5 | 7.3 |
| Other (includes military and unknown) | 2.0 | 1.4 | 3.4 |
| **Total** | **54.1** | **45.9** | **100.0** |

*Source*: Indiana Department of Public Welfare, Annual Report, FY 1991.

One disturbing inconsistency stands out when comparing the proportions of substantiated and indicated cases of abuse and neglect and the proportions of fatalities from these causes. As noted above, more than three-fourths of the fatalities occurred among children younger than age four, but this age group represented only 17% of the substantiated and indicated cases of physical abuse and 34% of the cases of neglect in FY 1991. In FY 1992, children younger than four years of age constituted 16% of the victims of physical abuse and 34% of those who were neglected. Some of the difference may be accounted for by the greater vulnerability and fragility of very young children, but the figures also suggest that underreporting may be particularly serious for the state's youngest children. As a group, they are far less visible to the types of individuals who typically file initial reports of suspected abuse and neglect. Further, the youngest victims are often unable to articulate what has happened to them, and their injuries may be more readily explained away by adult caretakers as the unfortunate outcomes of falls or other accidents to which this age group is prone.

## Investigation Outcomes

Cases of suspected child abuse and/or neglect are reported to the child protective services of each Indiana county. Following investigation, reported cases of maltreatment are classified as "substantiated," "indicated," or "unsubstantiated" (see Box for the legal definitions of case status). Cases of substantiated and indicated institutional abuse and neglect (that is, cases occurring in settings charged with the care of children such as hospitals, day care centers, and schools) are reported separately. Although substantiation and indication statistics are the only available gauge of child maltreatment, authorities caution against accepting these numbers as a true measure of existing child abuse and neglect. Several factors muddy the waters:

> The volume of cases reported to child protective service agencies, time spent on the investigation, who reported the case, resources available in the community, and variations in policy and practice are among those which may affect whether a report is confirmed.[9]

**Definitions of Case Status**

Substantiation: A report may be substantiated when evidence of facts obtained during the investigation provides a reasonable basis to assume that abuse or neglect occurred according to the legal definition of child abuse or neglect, found in subsection 201.2; or when the perpetrator admits having abused or neglected the child who is the subject of a report.

NOTE: With regard to the latter situation, the fact that a person admits to child abuse or neglect does not negate the need to complete a thorough investigation in order to corroborate the admission.

Indication: The indicated status is to be used only when there are significant indications that a child may be at risk, or there is evidence that abuse or neglect may have occurred; but it is impossible either to substantiate or unsubstantiate a report. Consideration of potential risk to a child is discussed in subsection 205.47.

For example, in some sexual abuse cases, there may be no injury; and the alleged perpetrator may deny the allegations. However, the descriptive detail given by a young child may indicate that the abuse probably did occur; but sufficient evidence is not available to substantiate the report.

Unsubstantiation: Unsubstantiation of a report should be used when no evidence, facts, or indications are found during the investigation to corroborate the allegations found in the report. See subsection 205.55 regarding the expungement of information pertaining to unsubstantiated cases.

*Source:* Indiana Department of Public Welfare Manual, Section 205.51, April 1991.

Frequent press accounts of newly uncovered cases of long-hidden abuse suggest that underreporting of child maltreatment remains a reality in Indiana, as elsewhere in the nation.

The rates of substantiated and indicated cases of child abuse and neglect run parallel with reported cases. Table 4.2 traces recent trends in child maltreatment in Indiana. In FY 1991, there were 32,679 substantiated and indicated cases of neglect and sexual and physical abuse (395 institutional cases and 32,284 noninstitutional cases). In just two years, substantiated and indicated cases increased by 59%. In FY 1992, however, there were 30,057 substantiated and indicated cases of neglect and sexual and physical abuse (362 institutional cases and 29,695 noninstitutional cases). While the encouraging 8% decline in noninstitutional cases parallels the decline in reported cases, again, caution is advised in viewing this one-year decrease as the beginning of a trend.

**Table 4.2 Substantiated and Indicated Cases of Child Abuse and Neglect in Indiana, FY 1989 - 1992**

| | Fiscal Year | | | |
|---|---|---|---|---|
| | **1989** | **1990** | **1991** | **1992** |
| **Noninstitutional** | | | | |
| Substantiated and indicated cases: | | | | |
| Neglect | 10,137 | 14,111 | 17,332 | 15,825 |
| Sexual abuse | 4,816 | 6,229 | 6,912 | 6,729 |
| Physical abuse | 5,310 | 6,535 | 8,040 | 7,141 |
| Rate of substantiated and indicated noninstitutional cases per 1,000 children under age 18 | 12.5 | 16.6 | 22.2 | 20.4 |
| **Institutional** | | | | |
| Substantiated and indicated cases: | | | | |
| Neglect | 30 | 63 | 62 | 59 |
| Sexual abuse | 153 | 154 | 155 | 132 |
| Physical abuse | 134 | 186 | 178 | 171 |
| **Total cases all types** | **20,580** | **27,278** | **32,679** | **30,057** |

*Source*: Indiana Department of Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report,FY 1992.

**Table 4.3a Type of Abuse of Indiana Children by Age Group, FY 1991**
**(*N* = 14,952 Substantiated and Indicated Cases; Institutional Cases not included)**

| | | Age Group | | | | |
|---|---|---|---|---|---|---|
| | Total | 0 - 3 Years | 4 - 6 Years | 7 - 12 Years | 13 + Years | Age Not Reported |
| **Deaths** | **25** | **19** | **2** | **3** | **1** | **0** |
| **Sexual abuse** | | | | | | |
| Incest | 557 | 45 | 105 | 205 | 198 | 4 |
| Exploitation | 126 | 10 | 19 | 53 | 44 | 0 |
| Rape | 404 | 12 | 14 | 71 | 304 | 3 |
| Child molestation | 5,822 | 689 | 1,068 | 1,927 | 2,097 | 41 |
| Deviant sexual act | 523 | 42 | 108 | 219 | 152 | 2 |
| Child seduction | 1 | 0 | 0 | 1 | 0 | 0 |
| **Total children involved*** | **6,912** | **762** | **1,241** | **2,273** | **2,588** | **48** |
| **Physical abuse** | | | | | | |
| Bruises/cuts/welts | 4,548 | 726 | 795 | 1,606 | 1,388 | 33 |
| Bone fracture | 145 | 79 | 15 | 20 | 31 | 0 |
| Skull fracture/brain damage | 54 | 46 | 4 | 4 | 0 | 0 |
| Internal injury | 29 | 18 | 4 | 2 | 5 | 0 |
| Wounds/punctures/bites | 142 | 37 | 18 | 42 | 45 | 0 |
| Burns/scalds | 173 | 80 | 47 | 34 | 12 | 0 |
| Poisoning | 10 | 8 | 1 | 0 | 1 | 0 |
| Asphyxiation/suffocation | 22 | 5 | 7 | 4 | 6 | 0 |
| Shaking/dislocation/sprains | 103 | 44 | 8 | 23 | 28 | 0 |
| Drowning | 10 | 3 | 1 | 2 | 4 | 0 |
| Inappropriate discipline | 4,645 | 669 | 736 | 1,684 | 1,542 | 14 |
| Gunshot wounds | 33 | 1 | 7 | 12 | 13 | 0 |
| **Total children involved*** | **8,040** | **1,391** | **1,350** | **2,768** | **2,489** | **42** |

*A child may be the victim of more than one type of abuse.

*Source*: Indiana Department of Welfare, Annual Report, FY 1991.

**Table 4.3b Type of Neglect of Indiana Children by Age Group, FY 1991**
**(*N* = 17,332 Substantiated and Indicated Cases; Institutional Cases not included)**

| | | Age Group | | | | |
|---|---|---|---|---|---|---|
| | **Total** | **0 - 3 Years** | **4 - 6 Years** | **7 - 12 Years** | **13 + Years** | **Age Not Reported** |
| **Deaths** | **23** | **18** | **1** | **3** | **1** | **0** |
| **Neglect** | | | | | | |
| Lack of supervision | 7,927 | 2,607 | 1,582 | 2,368 | 1,346 | 24 |
| Failure to thrive | 222 | 153 | 20 | 37 | 12 | 0 |
| Malnutrition | 120 | 82 | 16 | 14 | 8 | 0 |
| Medical neglect | 1,758 | 830 | 213 | 446 | 260 | 9 |
| Educational neglect | 1,334 | 46 | 179 | 701 | 401 | 7 |
| Abandonment | 762 | 289 | 116 | 152 | 205 | 0 |
| Close confinement | 114 | 39 | 32 | 32 | 11 | 0 |
| Lock in/out | 340 | 80 | 66 | 80 | 112 | 2 |
| Lack of food/shelter/clothing | 2,727 | 1,024 | 536 | 804 | 355 | 8 |
| Environment life/health endangering | 5,715 | 2,240 | 1,114 | 1,605 | 739 | 17 |
| Poor hygiene | 2,300 | 850 | 462 | 760 | 215 | 13 |
| **Total children involved*** | **17,332** | **5,936** | **3,214** | **5,224** | **2,900** | **58** |

*A child may be a victim of more than one type of neglect.

*Source*: Indiana Department of Welfare, Annual Report FY 1991.

## Patterns of Abuse and Neglect

Child maltreatment in Indiana takes many different forms (Tables 4.3a and 4.3b). As the Commission report stated:

> Children in Indiana are beaten with hands, fists, electrical cords; raped and sodomized; burned by cigarettes and scalded in bath tubs. They are neglected by not giving them adequate food, clothing, shelter, supervision and medical attention.[10]

There are patterns in abuse and neglect that vary with the age and gender of the child involved (Table 4.4). Substantiated and indicated sexual abuse cases increase with age and are far more likely to involve girls

(79% in FY 1991) than boys (21%). The true figures for sexual abuse of boys are probably higher than reported. The relatively low numbers of substantiated and indicated cases of abuse among teens suggests that maltreatment in this age group may also be underreported in Indiana.

Some of the more brutal forms of physical abuse occur among children younger than age four, who are poorly equipped to defend themselves. The youngest Hoosiers are also far more likely to be victims of neglect.[11] Eight in ten in FY 1992) of Indiana's abused and neglected children were white. The proportions of physically abused and neglected nonwhite children are only slightly higher than their proportion of the state's child population (13% in 1990). This finding can be explained by the greater incidence of economic stress, a major contributing factor to child maltreatment, among Indiana's families of color (discussed in Chapter 2).

**Table 4.4 Demographic Characteristics of Indiana's Abused and Neglected Children, FY 1991 (*N* = 32,284 Substantiated and Indicated Cases; Institutional Cases not included)**

| | Physical Abuse % | Sexual Abuse % | Neglect % | Total % |
|---|---|---|---|---|
| **Age** | | | | |
| 0 - 3 | 17.3 | 11.0 | 34.2 | 25.1 |
| 4 - 6 | 16.8 | 18.0 | 18.5 | 18.0 |
| 7 - 12 | 34.4 | 32.9 | 30.1 | 31.8 |
| 13 + | 31.0 | 37.4 | 16.7 | 24.7 |
| Not reported | 0.5 | 0.7 | 0.3 | 0.5 |
| **Gender** | | | | |
| Male | 51.1 | 21.4 | 50.9 | 44.6 |
| Female | 48.9 | 78.5 | 49.0 | 55.3 |
| Not reported | – | – | 0.1 | 0.1 |
| **Race/ethnicity** | | | | |
| White | 82.1 | 84.0 | 78.6 | 80.6 |
| African-American | 13.8 | 12.4 | 17.0 | 15.2 |
| Hispanic/Latino | 1.3 | 1.2 | 1.4 | 1.4 |
| Other | 2.8 | 2.4 | 3.0 | 2.8 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** |
| **Total Number of Children** | **8,040** | **6,912** | **17,332** | **32,284** |

*Note*: Data reflect multiple types of abuse for some children.

*Source*: Indiana Department of Public Welfare, Annual Report, FY 1991.

## Maltreatment and poverty

A national survey completed in 1986 found strong relationships between child maltreatment and family poverty:

> The estimated incidence of maltreatment of all types was about seven times as great among children living in families with annual incomes below $15,000 as among those from higher-income families. Rates of abuse were almost five times as high among low-income children as among others, and rates of neglect were nine times as high.[12]

Indiana's current reporting system does not include direct measures of socioeconomic status. Anecdotal information from child protection workers, however, suggests that even though children from all socioeconomic backgrounds have been victimized, the connection of maltreatment with poverty in Indiana is as strong as elsewhere in the nation.

## Some characteristics of victims and their families

J. E. Korbin's review of studies of child abuse and neglect in a variety of cultures showed that some children are consistently more likely to be maltreated than others. Children who are physically ill or malnourished, as well as those who are deformed or handicapped, tend to be abused more frequently. It is worth noting that obvious handicaps may elicit parental compassion, while milder forms of dysfunction, such as undiagnosed learning or attention problems, may lead to mounting parental frustration, increasing the potential for abuse. Other factors that make children vulnerable include large family size, gender, difficult births, and personality characteristics considered undesirable. Finally, the essentially normal, yet troublesome behaviors associated with some developmental stages—particularly infancy, "toddlerhood," and adolescence—may trigger maltreatment. In all cultures, the potential for abuse and neglect can be moderated by social supports available through family and community. "When child rearing is a shared concern within a supportive network," Korbin notes, "the consequences of having an inadequate or aggressive parent are diminished."[13]

***"When child rearing is a shared concern within a supportive network," Korbin notes, "the consequences of having an inadequate or aggressive parent are diminished."***

Parents in certain circumstances are more likely to be abusers than are others. One study of 6,000 households found higher rates of abuse among single parents. Living in poverty, however, was a major contributing factor. Richard Gelles, who conducted the study, reported that the rate of severe violence against children was highest among very young, single fathers earning less than $10,000 a year.[14] These findings also suggest the need for support systems and programs designed to help families deal with economic stress and the frustrations of parenthood.

No detailed data relating abuse and neglect to family structure exist for the state of Indiana as a whole. Similar patterns of substantiated and indicated maltreatment of children were found for Marion County in a study conducted by Oliver Tzeng of the Osgood Laboratory for Cross-Cultural Research at Indiana University-Purdue University at Indianapolis (IUPUI). Family conditions creating special risk for abuse included:

1. One or both parents [with] a history of being abused or being reared in a family in which one or more other members were abused.
2. One or both parents . . . dependent on alcohol or other drugs.
3. [An] isolated [family that] lacks social and/or economic supports from friends, relatives, or community agencies.
4. Various stress factors in the family [such as family discord, lack of parenting skills, authoritarian methods of discipline, mental health problems, heavy child care responsibilities, insufficient income, unstable living conditions].
5. Other precipitating situations [such as a child with a "difficult" temperament, who cries, is resistant to change, a finicky eater, hard to potty train, hyperactive, or noncooperative in behavior].[15]

The factors uncovered in Marion County are the same factors reported elsewhere in the nation.

## Perpetrators

Natural parents were the perpetrators in the majority (86%) of Indiana's substantiated and indicated cases of neglect in FY 1991 (Table 4.5). Natural parents were also the perpetrators in just under half (48%) of the substantiated and indicated cases of abuse. Other perpetrators include step-parents (10%) and other relatives (14%). In more than a fourth of the abuse cases (28%), the perpetrator was not related to the child. Natural parents were more likely to be the perpetrators of physical abuse (68%) than of sexual abuse (24%). Compared with neglect and physical abuse, higher proportions of sexual abuse were perpetrated by other relatives (21%) and unrelated individuals (41%). Table 4.6 contains additional demographic characteristics of perpetrators in FY 1991. Males are more likely to be implicated in physical and, particularly, sexual abuse; females are more likely to be implicated in neglect. More than eight in ten perpetrators of abuse and neglect in Indiana are white. The same patterns were found in the FY 1992 data.

Sixty-nine individuals were designated as perpetrators in the fatalities that resulted from abuse and neglect in FY 1991; only one remained unidentified at the time of the FY 1991 report. Of the 68 perpetrators named, all were individuals in whom a young child would normally place trust. Nearly

**Table 4.5 Relationship of Perpetrator(s) to Indiana Child Abuse and Neglect Victims, FY 1991 (*N* = 41,629 Substantiated and Indicated Cases; Duplicated Count)**

| Relationship | Physical Abuse % | Sexual Abuse % | Neglect % | Total Abuse & Neglect % |
|---|---|---|---|---|
| Natural parent | 68.2 | 23.8 | 86.1 | 69.5 |
| Step-parent | 12.4 | 7.4 | 4.5 | 7.0 |
| Adoptive parent | 1.7 | 1.2 | 1.0 | 1.2 |
| Grandparent | 1.8 | 3.3 | 1.8 | 2.1 |
| Sibling | 0.9 | 4.9 | 0.4 | 1.4 |
| Other relative | 2.6 | 12.8 | 1.3 | 3.9 |
| Boy/girlfriend of parent | 7.3 | 4.8 | 2.3 | 4.0 |
| Babysitter | 1.0 | 1.8 | 0.6 | 0.9 |
| None | 2.9 | 34.6 | 1.6 | 8.4 |
| Unknown | 1.1 | 5.4 | 0.5 | 1.6 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** |
| **Total number of counts of abuse/neglect** | **9,939** | **8,226** | **23,464** | **41,629** |

*Source*: Indiana Department of Public Welfare, Annual Report, FY 1991.

three in four (74%) were natural parents, and the remainder were other relatives or had continuing relationships with natural parents. Ten of the perpetrators (14%) were themselves adolescents between the ages of 13 and 19. In FY 1992, 59 perpetrators of fatalities were identified. Of these, 83% were natural parents. Four were between the ages of 17 and 19.

Indiana's statistics on child abuse and neglect are similar to those for the entire nation. Indiana data do not tell us, however, about the linkages within the state among child maltreatment and such factors among perpetrators as age, socioeconomic status, household type, and the accessibility of community supports for troubled families. Also of growing concern nationally is maltreatment of children by other children. Current data-collection practices in Indiana do not allow ready identification and study of state trends in this disturbing phenomenon.

## Fatalities

Child fatalities from abuse and neglect in Indiana have followed an overall upward, but annually fluctuating, trend during the ten-year period from FY 1982 through FY 1991 (Figure 4.2). Most shocking was the unprecedented 79% increase in noninstitutional fatalities from 29 in FY 1989, to 52 in FY 1990. The number of fatalities fell slightly (by 8%) in FY 1991, but at 48, was much higher than for any other year prior to 1990. Fatalities rose again, by one, to 49 in FY 1992. For the past three years, a Hoosier child has died from abuse and neglect nearly every week. From FY 1989 through FY 1992, a total of 47 Indiana counties had child fatalities. Although it is to be expected that the numbers of deaths will be related to a county's population size, the state's most populous counties, representing a little more than a third of the state's children, accounted for half of all child maltreatment fatalities.

**Table 4.6 Demographic Characteristics of Indiana Perpetrators of Child Abuse and Neglect, FY 1991 (*N* = 28,014 Substantiated and Indicated Cases; Unduplicated Count)**

| | Physical Abuse % | Sexual Abuse % | Neglect % | Total % |
|---|---|---|---|---|
| **Gender** | | | | |
| Male | 54.2 | 83.7 | 31.1 | 51.0 |
| Female | 45.4 | 13.0 | 68.6 | 48.0 |
| Unknown | 0.4 | 3.3 | 0.2 | 1.1 |
| **Race/ethnicity** | | | | |
| White | 82.5 | 75.4 | 83.1 | 81.0 |
| African-American | 13.9 | 13.1 | 14.1 | 13.8 |
| Hispanic/Latino* | 1.3 | 1.6 | 1.4 | 1.4 |
| Other | 0.7 | 0.6 | 0.5 | 0.6 |
| Unknown | 1.6 | 9.2 | 1.0 | 3.2 |
| **Total number of perpetrators** | **8,020** | **7,050** | **12,944** | **28,014** |

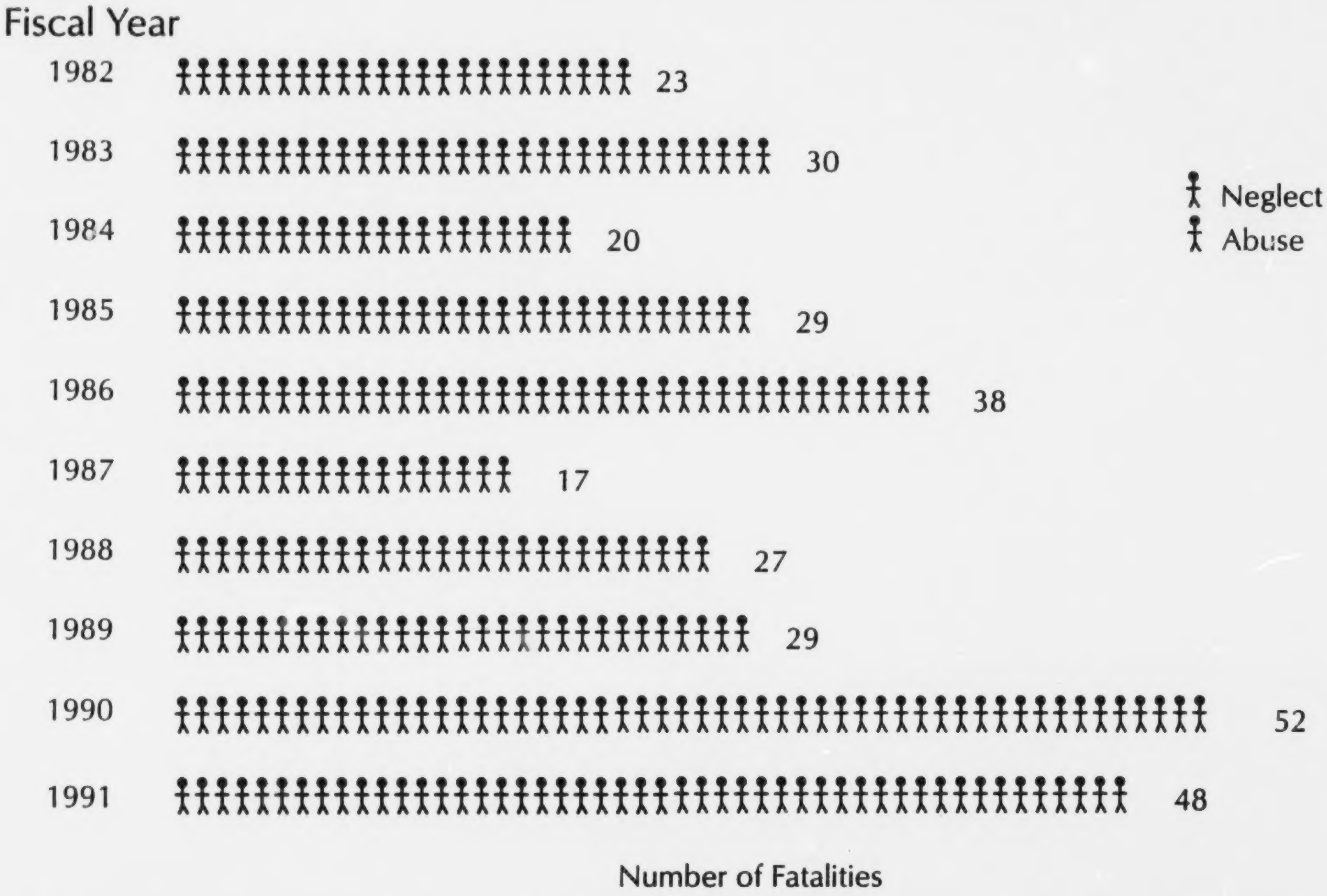
*Persons of Hispanic/Latino origin may be of any race.

*Source*: Indiana Department of Welfare, Annual Report, FY 1991.

During the ten-year period from FY 1982 through FY 1991, 313 Hoosier children—more than enough to fill an entire grade school—died from abuse and neglect (Figure 4.2).[16] No state agency reports information that would show how many of these dead infants and children were from families who received publicly funded social services or who had been investigated previously, either in the same community or elsewhere, for suspected abuse and/or neglect.

Nationally, children younger than age *five* constituted just over three-fourths of the maltreatment fatalities. In Indiana, children younger than

**Figure 4.2 Fatalities Among Abused and Neglected Indiana Children, FY 1982 - FY 1991 (313 Substantiated and Indicated Cases)**



*Source*: Prepared by the Indiana Youth Institute from data in Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991.

age *four* (Table 4.7) constituted 77% of the fatalities in FY 1991 (76% of the deaths from abuse and 78% of the deaths from neglect). In FY 1992, children younger than age four constituted 76% of the fatalities (68% of the deaths from abuse and 83% of the deaths from neglect). Between FY 1986 and FY 1991, half of Indiana's child fatalities occurred through neglect, a higher proportion than for the nation as a whole, where neglect accounted for four in ten deaths.[17]

**Table 4.7 Indiana Child Deaths (Noninstitutional) from Abuse and Neglect, by Age of Victim, FY 1989 - 1992**

| Age of Child | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|
| Under 1 | 17 | 25 | 23 | 15 |
| 1 - 3 | 7 | 14 | 14 | 22 |
| 4 - 6 | 2 | 8 | 3 | 7 |
| 7 - 9 | 1 | 2 | 1 | 3 |
| 10 - 12 | 1 | 1 | 5 | 2 |
| 13 -16 | 1 | 2 | 2 | 0 |
| **Total** | **29** | **52** | **48** | **49** |

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

## Substitute Care

The care of dependent children has been a persistent community concern. From antiquity well into the 19th century, children and young adolescents whose parents or other relatives could not care for them were "placed out" with families—generally on terms tantamount to indentured servitude. As the nation began to grow in the early days of the republic, communities began to look increasingly to institutional solutions for managing problematic populations. Mothers and children without means of financial support went to "poor houses" and later "poor farms" where, in return for as much work as they were able to perform, they received the bare necessities for sustaining existence. In large cities, homeless children were gathered into houses of refuge; by the last half of the century most had been replaced with orphanages and "half-orphanages" that varied greatly in the quality of care they offered.

The idea of placing children with families remained strong. The "orphan trains" of the Children's Aid Society and others brought thousands of children from major cities on the east coast to live with midwestern families, some of them in Indiana. Many of these placements were no more humane than the earlier indenturing system. A remarkable number, however, turned out well for all concerned. This experience and other similar endeavors showed that viable alternatives to institutional care were possible, creating renewed interest in the "fostering" of children. The first White House Conference on the Care of Dependent Children in 1909 ended with strong recommendations that foster care within families was the preferable way to care for dependent children outside their own homes. As a direct outgrowth of the conference, the Child Welfare League of America was founded in 1920. The League continues to set national standards for the out-of-home care of children and for the caseloads of workers who supervise such placements.

## Foster care in Indiana

Foster homes remain the most widely used means for caring for dependent, abused, and neglected children and young adolescents, both nationally and in Indiana. In spite of a declining child population, the number of Hoosier youngsters requiring out-of-home care continues to grow (Table 4.8). Half (51%) of the state's 8,598 children in substitute care in FY 1992 were living with foster families. Another 24% were living in the homes of relatives, while 23% were cared for in institutions, group homes, and hospitals.

More than three-fourths (79%) of the children in substitute care in FY 1992 were placed outside their own families because they needed protective services (Table 4.9). Since 1989, such children have been a rising proportion of those placed outside of their homes.

**Table 4.8 Types of Placement for Indiana Children in Substitute Care, FY 1989 - 1992**

| | End of June | | | |
|---|---|---|---|---|
| **Type of Placement** | **1989 (%)** | **1990 (%)** | **1991 (%)** | **1992 (%)** |
| Foster home | 50.3 | 50.2 | 52.6 | 50.9 |
| Relative's home | 21.0 | 21.7 | 21.9 | 23.7 |
| Institution | 18.7 | 17.7 | 14.9 | 14.5 |
| Group home | 5.6 | 5.7 | 5.4 | 4.9 |
| Hospital/nursing home | 2.4 | 2.6 | 3.1 | 3.3 |
| Other | 2.0 | 2.1 | 2.1 | 2.7 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** |
| Total number of children in substitute care | 6,196 | 7,224 | 8,126 | 8,598 |

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

**Table 4.9 Reasons Indiana Children Entered Substitute Care, FY 1989 - 1992**

| | End of June | | | |
|---|---|---|---|---|
| **Reason** | **1989 (%)** | **1990 (%)** | **1991 (%)** | **1992 (%)** |
| Protective service | 72.3 | 74.0 | 77.9 | 79.1 |
| Delinquent behavior | 11.3 | 11.5 | 9.9 | 9.9 |
| Parent absence or condition | 7.3 | 6.3 | 5.4 | 4.9 |
| Other family interaction problem | 5.7 | 4.8 | 3.8 | 3.3 |
| Child disability | 1.4 | 1.1 | 0.9 | 0.8 |
| Other | 2.0 | 2.2 | 2.1 | 2.0 |
| **Total** | **100.0** | **99.9** | **100.0** | **100.0** |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

Another 10% were placed because of delinquent behavior. Parent absence or condition, family interaction problems, or child disability accounted for an additional 9% of the cases.

At the time most children are placed in substitute care, eventual reunification with their own families is the goal. Reunification does not take place for many reasons, not the least of which is that needed intervention services are not available to *adult* family members once their children have been taken from the home. Some children remain in the limbo of foster care for years, although the state has increased efforts to find more permanent arrangements for them. Many states, including Indiana, are making greater use of intensive family-preservation services. This strategy, recommended by the Commission on Abused and Neglected Children, can be effective both for offering needed protection to children and for preventing removal from their homes.

**Table 4.10 Children Leaving Substitute Care, FY 1989 - 1992**

| | FY 1989 | | FY 1990 | | FY 1991 | | FY 1992 | |
|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % |
| Reunification (own home) | 1,557 | 63.3 | 1,728 | 60.9 | 1,951 | 59.5 | 2,327 | 64.9 |
| Adoption | 205 | 8.3 | 260 | 9.2 | 314 | 9.6 | 315 | 8.8 |
| Placement with a relative | 97 | 3.9 | 175 | 6.2 | 164 | 5.0 | 227 | 6.3 |
| Guardianship | 78 | 3.2 | 90 | 3.2 | 115 | 3.5 | 110 | 3.1 |
| Independent living | 240 | 9.8 | 306 | 10.8 | 334 | 10.2 | 314 | 8.8 |
| Other | 284 | 11.5 | 280 | 9.9 | 401 | 12.2 | 294 | 8.2 |
| **Total** | **2,461** | **100.0** | **2,839** | **100.2** | **3,279** | **100.0** | **3,587** | **100.1** |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Department of Public Welfare, Annual Reports, FYs 1989, 1990, 1991; Indiana Family and Social Services Administration, Annual Report, FY 1992.

In FY 1992, there were 3,587 children who left substitute care (Table 4.10). This figure represents 42% of all Hoosier children in substitute care during that year. Of those children who left substitute care, more than six in ten (65%) were reunited with their families. Another 6% went to live with relatives and 9% were placed for adoption. The remainder went into independent living situations (9%), generally because they had reached age 18, or they left substitute care for other reasons (8%).

## Institutional Abuse

Of all maltreatment, that which represents the greatest failure of the state's supportive services for children is the abuse and neglect that occurs within institutions entrusted with their care and well-being. In FY 1991, 155 substantiated and indicated cases of sexual abuse, 178 cases of physical abuse, and 62 cases of neglect occurred within institutions (Table 4.11). Nearly one in three of these cases took place in a school (31%), and more than one in five cases occurred in a foster home (22%). Day-care centers and homes, residential facilities, state institutions, and hospitals were also sites of abuse and neglect. In FY 1991, two children died from abuse, and one child died of neglect while under institutional care; all three fatalities were children younger than age four. In FY 1992, institutional abuse and neglect each contributed to one child fatality.

**Table 4.11 Cases of Institutional Child Abuse and Neglect in Indiana by Type of Facility, FY 1991 (Substantiated and Indicated Only)**

| Facility | Physical Abuse | Sexual Abuse | | Neglect | Total | |
|---|---|---|---|---|---|---|
| | | Facility Staff | Other Resident | | No. | % |
| Foster home | 45 | 15 | 12 | 16 | 88 | 22.3 |
| School | 78 | 37 | 0 | 6 | 121 | 30.6 |
| Day care center | 14 | 7 | 0 | 11 | 32 | 8.1 |
| Day care home | 27 | 14 | 0 | 17 | 58 | 14.7 |
| Residential facility | 8 | 8 | 38 | 10 | 64 | 16.2 |
| State institution | 6 | 4 | 13 | 0 | 23 | 5.8 |
| Hospital | 0 | 2 | 5 | 2 | 9 | 2.3 |
| **Total** | **178** | **87** | **68** | **62** | **395** | **100.0** |

*Source*: Indiana Department of Public Welfare, Annual Report, FY 1991.

## Corporal punishment in Hoosier institutions

The Indiana Commission on Abused and Neglected Children and their Families took a strong position against the use of physical forms of discipline in child-serving institutions in Indiana. The report stated:

> Corporal punishment must be banned in all Indiana schools, state licensed group homes, child-caring institutions, and foster homes by December 1993.[18]

Although not yet actually prohibited by law, the use of corporal punishment in foster homes is emphatically discouraged by the Division of Family and Children in the training provided to foster parents. Alternative forms of discipline are described and recommended.

## Corporal punishment in Indiana's schools

Indiana is one of a number of states that still permits corporal punishment of public school pupils in elementary grades through high school. While the traditional "hickory stick" and ruler may have been replaced by the paddle as a means for striking students, the effects are the same. The practice has come under fire from physicians, school psychologists, guidance counselors, nurses and from the professional associations to which they belong. Teachers, school administrators, and local school boards and their professional associations, on the other hand, are not united in their views. Several school corporations, as different as Ft. Wayne and Hamilton County, roundly oppose the practice. They have exercised local option to ban paddling from their schools. Other school corporations insist that there is no other effective way to administer discipline to some students.[19] One local Teachers Association president in Indiana has been quoted in the press as saying:

> A lot of those students come from those homes where there isn't any discipline. . . . When you're dealing with a segment of society where physical punishment is the norm, sometimes that's the way the schools have to deal with the situation. . . . Properly done, I don't have a problem with it.[20]

Data files maintained by the Office of Civil Rights of the U.S. Department of Education, however, reveal that nationally, students receiving corporal punishment are far more likely to be male than female, African-American than white, and/or from low income rather than middle class families.[21] Anecdotal evidence supports the position that the same

**Table 4.12 Corporal Punishment, 1986, Indiana and Selected States**

| Rank | State | No. Receiving Corporal Punishment | % |
|---|---|---|---|
| 1. | Arkansas | 64,466 | 13.7 |
| 11. | Kentucky | 30,075 | 4.7 |
| 14. | Ohio | 43,626 | 2.7 |
| **15.** | **Indiana** | **30,830** | **2.7** |
| 23. | Illinois | 10,251 | 0.6 |
| 26. | Michigan | 8,692 | 0.5 |
| 50. | Vermont | 0 | |

*Source*: National Coalition of Advocates for Students.

unequal application of corporal punishment exists in Indiana. A rural elementary-school principal saw no irony when, in answer to a query about reporting procedures following paddling, he said that the general practice is to notify parents, but that the school occasionally makes exceptions when they "suspect child abuse in the home."

The last state-level survey data were collected by the Office of Civil Rights in 1986. Updated information will not be available from this source until late in 1993. According to projections based on data from the 1986 survey, some 30,830 children, or nearly 3% of Indiana's public-school students, received corporal punishment that year (Table 4.12). These figures place Indiana 15th among the states, almost tied with Ohio. Arkansas ranks first—providing corporal punishment to nearly 14% of that state's students. In contrast, Vermont has outlawed the practice statewide and reported no violations of the statute.[22]

In recent years, legislation that would ban corporal punishment in Indiana's schools has come before the state legislature three times. Twice, the legislature failed to pass the "no spank" bill introduced by Representative John Day (D-Marion County). A third attempt, growing out of the Commission Report, was made during the 1993 session, but the bill died in committee. In arguing for his position, Day stated:

> Unfortunately, we live in a violent society and we should do what ever we can, however modest, to reduce that violence. Our young people need to know that there are alternative ways to handle problems without the use of force. . . . [Corporal punishment] is not the answer. It does psychological, as well as physical, damage. The practice sends the wrong message—"Force is how we solve problems"—to students.[23]

Recent research suggests that physical punishment—whether administered by a parent or a school official—not only increases student violence, but may carry with it into adulthood serious mental health consequences such as depressive symptoms, alcohol abuse, and interpersonal violence.[24] Children who have been struck are left with feelings of helplessness and powerlessness. Indiana parents have reported that even their children who have *not* themselves been paddled, come home disturbed and frightened following observation of a classmate being so punished. Another body of educational research has found learning to be impeded by fear and tension. It is probably not coincidence that the same groups of students who are most likely to receive physical punishment are also the most likely to disengage early from the educational process and to drop out of school completely as soon as the law allows.

## Notes

1. R. tenBensel, Department of Maternal and Child Health, University of Minnesota, conversation March 1992.

2. This information was drawn from the excellent summary in: Indiana Chapter of the National Committee for Prevention of Child Abuse, *Indiana State Plan for the Prevention of Child Abuse and Neglect*, prepared for the Indiana Child Abuse Prevention Council, 1992. Another summary of factors related to child maltreatment may be found in: National Center for Children in Poverty, *Five Million Children; A Statistical Portrait of Our Poorest Young Citizens* (New York: National Center for Children in Poverty, School of Public Health, Columbia University, 1990).

3. M. A. Straus and colleagues have proposed a "Cultural Spillover Theory" to explain rising violence in American society. They propose that "violence in one sphere of life tends to engender violence in other spheres, and that *this carry-over process transcends the bounds between legitimate and criminal use of force*. Thus the more a society uses force to secure socially desirable ends (for example, to maintain order in schools, to deter criminals, or to defend itself from foreign enemies) the greater the tendency for those engaged in illegitimate behavior to also use force to attain their own ends." In M. A. Straus, "Discipline and Deviance: Physical Punishment of Children and Violence and Other Crime in Adulthood," *Social Problems* 38, 2 (1991), pp. 133-154.

4. D. Daro, and K. McCurdy, "Current Trends in Child Abuse Reporting and Fatalities: NCPCA's 1991 Annual Fifty State Survey." On-line summary. National Committee for Prevention of Child Abuse, 1992.

5. American Medical Association, Healthier Youth by the Year 2000 Project. "Adolescents Show the Highest Rates of Child Abuse and Neglect," *Target 2000*, 3,1 (Summer 1992), p. 1.

6. J. Garbarino. "National Expert on Family Violence Speaks on Adolescents as Victims and Perpetrators," *Target 2000*, 3, 1 (Summer 1992), pp. 2-3.

7. Division of Family and Children, Indiana Family and Social Services Administration, *Fiscal Year 1992 Annual Report* (Indianapolis: Indiana Family and Social Services Administration, 1992), p. 167.

8. Division of Family and Children, Indiana Family and Social Services Administration, *Fiscal Year 1992 Annual Report*, (Indianapolis: Indiana Family Social Services Administration, 1992), p. 181.

9. P. A. Schene. "Interventions in Child Abuse and Neglect." In J. C. Westman, ed., *Who Speaks for the Children? The Handbook of Individual and Class Child Advocacy* (Sarasota, FL: Professional Resource Exchange, Inc., 1991), p. 213.

10. Indiana Commission on Abused and Neglected Children and their Families, *Child Abuse and Neglect: Indiana's Emergency*. Preliminary Report. (Indianapolis: Indiana Commission on Abused and Neglected Children and their Families, September 30, 1992), p. 1.

11. Indiana Department of Public Welfare, *Annual Report, FY 1991*, pp. 157-8; Indiana Family and Social Services Administration, *Annual Report, FY 1992*, pp. 177-8.

12. National Center for Children in Poverty, *Five Million Children*, p. 59.

13. J. E. Korbin, "Child Maltreatment in Cross-Cultural Perspective: Vulnerable Children and Circumstances." In R. B. Gelles and J. B. Lancaster, eds., *Child Abuse and Neglect: Biosocial Dimensions* (New York: Aldine de Gruyter, Inc., 1987), pp. 31-55.

14. R. Gelles, "Child Abuse and Violence in Single-parent Families: Parent Absenic Deprivation," American Journal of Orthopsychiatry, 59, 4 (October 1989), p. 49.

15. O. C. S. Tzeng, H. C. Karlson, R. Fortier, *Handbook of Child Abuse and Neglect for Schools: Questions and Answers* (Indianapolis: Osgood Laboratory for Cross-Cultural Research, Indiana University-Purdue University at Indianapolis, 1988); Osgood Laboratory for Cross-Cultural Research, *Summary Statistics of Child Abuse and Neglect (Substantiated and Indicated) Cases in 1980-1987 for Marion County, Indiana* (Indianapolis: Osgood Laboratory for Cross-Cultural Research, 1989).

16. These figures do not include cases of institutional abuse and neglect. Indiana Department of Public Welfare, *Annual Report, FY 1989*, p. E-23; and *Annual Report, FY 1991*, p. 159.

17. Daro and McCurdy, "Current Trends in Child Abuse Reporting," p. 2; Indiana Department of Public Welfare, *Annual Report, FY 1989*, p. E-23; and *Annual Report, FY 1991*, p. 159.

18. Indiana Commission on Abused and Neglected Children and their Families, *Indiana's Emergency*, p. 75.

19. M. McCarthy, *The Debate Over Corporal Punishment*, Policy Memo Series No. 5 (Bloomington and Indianapolis, IN: Consortium on Educational Policy Studies, School of Education, Indiana University, October 1989).

20. n.a., "Teachers using the paddle less for discipline," *The Indianapolis Star* (July 8, 1992), p. C-2.

21. Data from the 1988 Elementary and Secondary School Civil Rights Survey supplied by the Office of Civil Rights, U.S. Department of Education, Washington, DC, 1992.

22. I. A. Hyman, *Reading, Writing, and the Hickory Stick: The Appalling Story of Physical and Psychological Abuse in American Schools* (Lexington, MA: Lexington Books, 1990).

23. J. Day, Speech to First Unitarian Church, South Bend, Indiana (May 15, 1988), p. 1.

24. M. A. Straus, "Discipline and Deviance," pp. 145-6; M. A. Straus and G. K. Kantor, "Physical Punishment by Parents: A Risk Factor in the Epidemiology of Depression, Suicide, Alcohol Abuse, Child Abuse and Wife Beating," Unpublished report (Durham, NH: Family Research Laboratory, University of New Hampshire, 1991).

Chapter 5

# Protecting Indiana's Children

Child Protection Services are based within the local offices of the Division of Family and Children in each county. They are required by policy to initiate investigations of abuse within 24 hours. Reports of neglect must be investigated within 15 days. Child protection workers, however, attempt to make an immediate assessment of the degree of risk that appears to be present and respond accordingly. Each county must also maintain a 24-hour system for receiving reports of abuse and neglect. Following investigation, reports are identified as "substantiated," "indicated," or "unsubstantiated," as discussed above. Consistently, just over half of all reports are classified as substantiated or indicated (53% of abuse cases, and 53% of neglect cases in Fiscal Year 1991).[1] While just under half of the reports are unsubstantiated, the process of accusation and investigation often causes extraordinary distress for the children and adults in the families involved. At present Indiana does not maintain information on the sources (or the consequences) of unsubstantiated reports.

## An Overloaded System

Indiana's child welfare system is simply overwhelmed. According to a 1987 study of 26 states, Indiana was the only state that had no specific statewide standard of preservice training qualifications for employment as an entry-level assistant caseworker. Currently, minimum qualifications for a position as caseworker include three years of full-time paid experience as a state assistant caseworker, plus completion of 27 semester hours of accredited college training, of which 15 hours must be in the social or behavioral sciences, education, or business administration. A baccalaureate degree (which includes the same 15-hour course-work requirement described above) may be substituted for the required experience.[2]

Although the Division of Family and Children provides inservice training, new workers sometimes wait months before they receive this instruction. In the meantime, new caseworkers are often inundated by caseloads of 65 or even more. Such caseloads are four times the maximum of seventeen cases recommended by the Child Welfare League of America. Another survey done in 1987 found Indiana's salary standards for caseworkers to be the lowest among the fifty states at that time.[3] Beginning caseworker salaries were raised to $17,758 in FY 1991. Although this figure includes a 5.3% "recruitment differential" aimed at attracting and keeping qualified workers, Indiana salaries remain near the bottom for all states. If he or she is the sole breadwinner for a family of four, a Hoosier caseworkers's own household would qualify for food stamp benefits.

***Indiana salaries for child welfare caseworkers remain near the bottom for all states. If he or she is the sole breadwinner for a family of four, a Hoosier caseworkers's own household would qualify for food stamp benefits.***

In 1990, the Indiana legislature created 93 new casework positions for the state's 92 counties, the first increase in the number of casework positions in the state since 1978. The positions carried a price tag of about $2 million. The legislation was a compromise that fell far short of the provisions of Indiana Senate Bill 238 which, in a two-year phase-in at a cost estimated at $18.2 million, would have brought Indiana's caseload standards into compliance with those recommended by the Child Welfare League of America.[4]

Fewer than half the slots created in 1990 were designated for child protective service workers. Further, budgetary problems and other complications have meant that, two years later, some counties are still without needed staff increases. Already low-salaried, human service employees at both county and state levels are entering a third year (FY 1993) without pay raises. Not surprising, the combination of inadequate preparation, poor compensation and heavy caseloads requiring daily decisions with long-term consequences has led to very low morale and very high staff turnover. Families often must adjust to a bewildering succession of caseworkers during the periods when they require services from the state.

## Marion County Consent Decree

In 1989, the Legal Services Organization of Indiana filed suit alleging that the Marion County Department of Public Welfare and the Indiana

Department of Public Welfare (now the Indiana Family and Social Services Administration) were violating the constitutional rights of the children they were charged with protecting. The class action suit covered only children who were wards of Marion County. A discussion of this important case is included below, nonetheless, because of the potentially broader implications of the consent decree entered by the State of Indiana Family and Social Services Administration for children in other counties.

The plaintiffs alleged that Marion County had too few caseworkers to provide adequate monitoring of the care and supervision of children removed from their homes or to make adequate efforts to return these children to their families. By July 31, 1992, all parties to the lawsuit had entered a consent decree covering all issues in the action, but that did not constitute an admission or finding on the merits of the case. The defendants believed that to avoid protracted and unnecessary litigation, it was "in the best interests of the State of Indiana and it citizens to resolve the issues" in this manner. Parties represented in the class covered by the decree were given until October 1, 1992, to comment or raise objections to the settlement. Following a report to the court on the content of these responses, the decree went into force.

The decree will be in force until Marion County has complied fully with the terms for two full years. Some of the key provisions of the consent decree are as follows:

- The "class" involved in the action included all children "who are, or will be, wards of the Marion County Department of Public Welfare, or any successor agency, pursuant to Child in Need of Services proceedings. . . ."
- The term "child welfare caseworker" includes both child protection and children's services caseworkers; any employees designated as investigators or assigned responsibilities similar to those of child welfare caseworkers are to be governed by the same standards.
- Children's services caseworkers are responsible for ongoing supervision of children who are wards of the county. Within two years, the maximum number of cases that children's services caseworkers can carry will be reduced to 35 *children*.
- Child protection services caseworkers investigate allegations of abuse and neglect. Within two years,

the maximum new cases per month that may be assigned must be reduced to 25 *families*.

- The state agreed to continue to provide a comprehensive continuum of preservice and inservice training programs for supervisors and caseworkers; new caseworkers must receive training before they receive cases.
- Existing rules requiring training for foster parents prior to licensure, as well as annual inservice training, will remain in full force.

Additional stipulations of the decree require detailed and meaningful case plans indicating the services to be provided to the children, as well as regular monitoring and supervision of children who are out of their homes. The new standards for Marion County require caseworkers "to physically see" at least every two months the children whom they supervise.[5] Although the full standards of the Child Welfare League of America will not be attained through this agreement, improvement in Marion County will be marked as an outcome of this decree. The Legal Services Organization expects that the injunction that is part of the settlement agreement will lead to similar improvements in the size of child welfare caseloads throughout the state.[6]

## Protecting Indiana's Children: Some Better Ways

### Commission on Abused and Neglected Children

Hoosiers have an opportunity to take a giant leap toward safeguarding Indiana's youngest citizens. The Commission on Abused and Neglected Children and their Families was established by P.L. 154-1992, adopted by the 1992 legislature. The 22-member commission had broad, bipartisan representation from the legal system, child advocacy groups, medical and social work professionals, legislators, and foster and adoptive parents. After intense work, the Commission submitted a preliminary report and recommendations to Governor Bayh in September 1992. The Commission unanimously proposed 16 recommendations (see Box, pp. 112-113).[7] If converted into new legislation to guide policy and practice, these recommendations will totally transform the state's capacity to respond to the crisis of child maltreatment.

The recommendations reflect the Commission's broad charge "to develop and present an implementation plan for a continuum of services to abused and neglected children and their families." As noted earlier, the Commission report examined the need to respond to the emergency on three levels: **prevention**, through community education about child abuse and neglect; **intervention** from the Indiana child welfare system; and **evaluation**, through establishing accountability to ensure that the system is responsible and meets the goal of assuring safety for all children. Although space does not permit summarizing the full contents of this extensive report, selected issues are discussed below.

*Prevention*. Although there are many efforts under way to prevent the maltreatment of children, Indiana presently lacks a complete and coordinated statewide system for prevention. The Indiana Chapter for Prevention of Child Abuse was commissioned by the Indiana Child Abuse Prevention Council to create the *Indiana State Plan for the Prevention of Child Abuse and Neglect*. This document, completed in 1992, was the first attempt within the state to identify the necessary components for a comprehensive approach to "preventing the hurt before it happens." The State Plan asserts:

> Comprehensive prevention programs must consider the kinds of children most at risk for abuse, a profile of perpetrators of child abuse and neglect and the circumstances under which adults are more likely to abuse children.
>
> Any prevention plan must be undertaken within the parameters of the environmental conditions currently existing in the state. An analysis of Indiana environmental conditions points to social conditions which reflect stable roots but changing family structure, technological advances which are possible but not readily accessible by social services, an economic base which is gravitating toward a service economy, and a conservative political structure.[8]

The state plan for the prevention of child abuse and neglect drawn up in 1992 outlines what needs to be done, but has not yet been implemented throughout the state.

The Commission on Abused and Neglected Children and their Families studied the issues further and made several recommendations.

## Summary of Recommendations

Commission on Abused and Neglected Children and their Families

1. By November 1, 1992, the Indiana Child Abuse Risk Evaluation (I-CARE) System must be initiated in all parts of the state. This system would provide more efficiently the same information now available to caseworkers and would help to ensure that cases are treated uniformly across the state. The Commission further recommends that one personal computer be provided for every two child welfare workers.
2. By July 1, 1995, caseload standards must not exceed a maximum of: 25 families per month (both new and existing cases) for child protection workers and 25 children (both new and existing cases) for child welfare caseworkers. This level should be achieved by reducing the average caseload by at least 25% per year for the next three years. Compliance with this recommendation must be met by hiring additional caseworkers rather than reducing the number of cases accepted for investigation.
3. Child welfare workers must be reclassified as specialists, they must be limited to child welfare work only and their job grades and compensation must be raised. Child welfare personnel classification and pay must be adjusted by January 1, 1993 to be commensurate with job responsibilities, education and experience.
4. Education and qualifications of child protection and child welfare intake caseworkers and supervisors must be revised to reflect the specific nature of the responsibilities.
    a. All workers must have a Bachelor's degree in Social Work or a related field (experienced caseworkers will be protected by a grandfather clause).
    b. All workers must have at least five days of competency based training prior to being assigned cases.
    c. All new caseworkers must "shadow" a trained caseworker for at least five days prior to being assigned cases.
    d. All child welfare workers must attend the statewide 5-day training program within 2 months of accepting assignments.
    e. All child welfare workers must complete at least 24 hours of continuing training each year.
    f. Child welfare supervisors must have a Master's degree in Social Work or a related field (existing supervisors will be protected by a grandfather clause).
5. Funding for child welfare services must be maximized to reflect a financial investment in Indiana's future workers and citizens.
6. Comprehensive family preservation services must be implemented in each county by 1995 and must include: 24-hour crisis intervention services; risk assessment, case management and monitoring; intensive in-home skill building and counseling; emergency respite care; after care linkage and evaluation.

7. Permanency planning for children must be expedited in accordance with Indiana Juvenile Code 31-6-4-19.

8. Plans for prevention programs on child abuse and neglect and family violence must be developed in each Indiana Division of Family and Children District by January 1, 1994 and implemented in each county by January 1, 1995. Responsibility for these plans rests with the District Division of Family and Children and must comply with the state plan developed by the Indiana Chapter of the National Committee for Prevention of Child Abuse for the Indiana Child Abuse Prevention Fund.

9. The role of the Advisory Committee for the Division of Family and Children should be expanded to include the annual review of all the recommendations set forth in this report, including the annual reports to comply with the recommendations. Arrangements should also be made for periodic external audits (no less than every five years) of child welfare services in Indiana.

10. Corporal punishment must be banned in all Indiana schools, state licensed group homes and child-caring institutions, and foster homes by December 1993.

11. Legislative or administrative regulations must be amended to allow the exchange of information between Child Welfare personnel and professionals providing evaluation and treatment services to children involved in the child welfare system. Inappropriate release of information relative to a child welfare case should be classified as a Class B misdemeanor.

12. The availability of low cost or subsidized mental health services needs to be greatly increased in all parts of Indiana by maximizing and using federal funding streams, including the expansion of Medicaid and the use of the Medicaid Rehab option.

13. The statutes of limitations on incest and child sexual abuse in civil and criminal cases should be eliminated.

14. A demonstration project in two urban and two rural townships should start in July 1993 to link township trustee offices and County Division of Family and Children offices in order to expedite the provision of emergency assistance funds to families receiving family preservation services.

15. By January 1, 1994, the phone access system to report suspected child abuse and neglect in all counties should be standardized. Personnel trained in child abuse and neglect must handle calls from the public regarding possible child abuse/neglect 24 hours per day. The child abuse hotline number must be advertised with all other emergency numbers, and the number should preferably be one consistent 4 or 7 digit number throughout the state (e.g., XXX-KIDS).

16. By January 1, 1994, protocols and guidelines for criminal history background checks of professionals and paraprofessionals working with children should be developed by a Division of Family and Children appointed working group representing law enforcement personnel, attorneys, child welfare staff, foster parents and day care providers.

They said that effective prevention should include:

- Primary prevention services that focus on the entire community and the environments in which all families live so as to prevent problems from occurring.
- Secondary prevention services that focus on those communities or families that are considered to be at risk for problems.
- Tertiary prevention services that are available after child abuse and neglect have occurred and are aimed at reducing the consequences of abuse.

Each level of prevention services requires appropriate tailoring to fit the complex of available services and needs at the local level; appropriate, high-quality training for all service-providers and a full complement of available family-support services. Educational efforts should include parenting-education classes in junior- and senior-high schools, parenting-skills training and seminars available to the community at large, and parent-support groups.

*Intervention.* The Commission report notes that while the primary goal of an acceptable system of intervention is to ensure the safety and well-being of children, the process must "protect the due process rights of all parties involved with the child welfare system: victims, alleged perpetrators, nonoffending parents, extended family members, and child welfare personnel." The full intervention process includes reporting and intake procedures, investigation, assessment and case plans, and disposition and follow-up services. Case management services are critical, if the intervention process is to provide accountable monitoring to prevent children from being "lost" in the system. Caseworkers require computerized technical support for record-keeping to document the progress of each child and family receiving services.

*Evaluation.* An effective evaluation system is needed to monitor the efficiency and effectiveness of the entire child welfare system. According to the Commission, evaluation must be designed to provide insight into how well the Indiana Juvenile Code is followed and to indicate where administrative guidelines need refining to eliminate misinterpretations and to clarify procedures. Finally, an analysis of data from the entire continuum of care is needed to foster improved planning and goal-setting for the overall child welfare system.

## Home-Based Family-Centered Services

The Commission report called for making family-preservation services, currently available in only a few counties, obtainable throughout the state. Traditionally, the first response to a report of substantiated abuse or neglect has been removal of the children involved from the home. As noted above, more than three-fourths of the FY 1992 placements of Indiana children were the result of a need for protective services. Such removal practices often lead to years of inconsistent out-of-home care, which has a high emotional and social cost to both parents and children. In addition, such care has a high financial cost to the state. Although some families cannot be held together, new approaches have demonstrated that many more could remain intact through provision of intensive family-preservation services. Following the reported successes of the first family-preservation program, Home Builders of Tacoma, Washington, there has been growing interest in the use of the home-based, family-centered model. Among the agencies that have demonstrated the effectiveness of such services for distressed Hoosier families are Families United, Family Works, Inc., and the Family Life and Education Program.[9]

***Although some families cannot be held together, new approaches have demonstrated that many more could remain intact through provision of intensive family preservation services.***

Family-preservation services offer support to troubled families on a 24-hour-a-day basis. Skilled professionals work intensively with family members to alleviate sources of distress within the household. An equally important part of their work is facilitating connections with other service providers when needed. Thus, they may furnish supports as various as obtaining relief from imminent cutoff of gas or electrical service, helping to clean up a house, finding a crib for an infant, obtaining tutoring for a child behind in school work, or getting a family member into medical, mental health, drug or alcohol treatment. It must be pointed out that, if judged on financial impact on the welfare budget alone, the *total* costs of such interventions may exceed those of the family-preservation agency personnel supplying direct support. In a great many cases, however, there also will be long-term financial savings.[10]

During the 1992 short session of the Indiana General Assembly, Senate Bill 174 was introduced. The bill would have created a family-preservation program for Indiana. The bill required the Division of Family and Children and the Division of Mental Health jointly to develop the program. The bill died in the Ways and Means Committee. The language of the bill was amended into P.L. 78-1992,[11] but no additional appropriations were provided to implement the changes. The Commission report calls for implementation of family-preservation services in all Indiana counties by 1995.

## Healthy Families Indiana

A new public/private partnership that seeks to prevent child abuse, Healthy Families Indiana, was launched in October 1992. This initiative involves collaboration among the Indiana Family and Social Services Administration, the Indiana State Department of Health, and the Indiana Chapter for Prevention of Child Abuse. The home-visitor program which inspired Healthy Families Indiana was developed in Hawaii, where it currently reaches over half of that state's high-risk new parents. Families participate voluntarily, and the program has virtually eliminated child abuse in the population served. The National Committee for Prevention of Child Abuse and Ronald McDonald Children's Charities are working to replicate the model across the United States. Healthy Families Indiana is being developed in coordination with existing efforts such as the Step Ahead planning process, the First Steps program, and the work of the Indiana Bureau of Family Protection.

## Additional prevention efforts

In addition to working at the state level, The Indiana Chapter for Prevention of Child Abuse fosters the formation of local Child Abuse Prevention Councils that work within their communities to increase public awareness about child maltreatment and its prevention. There are also many publicly and privately funded programs that nurture, strengthen, support, and educate families. These include:

- Personal/Family Counseling - assists individuals, families, and/or groups in overcoming personal problems through the use of trained professionals using formalized counselor-to-client interaction.
- Outpatient Mental Health Care - provides counseling and/or medication for persons with mental health problems and who are under psychiatric supervision involving less than an overnight stay.
- Personal Advocacy - conducts activities on behalf of an individual or family for the purpose of helping them secure needed services and benefits.

- Suicide Prevention and Crisis Mediation - provides crisis counseling and the mobilization of community resources for emotional and personal emergencies.
- Mutual Support Groups - offers opportunities for providing supportive interaction, information, and advice among individuals who share a common condition or situation.
- Paired Support - matches volunteers with individuals in a planned, personal relationship to lend emotional support, provide guidance, assist in social adjustment, and/or serve as appropriate role models.
- Life Skills Education - provides information and teaching relating to basic life situations and individual problem solving.
- Community Education and Information - delivers information to the general public regarding community problems, concerns, and issues through the use of the media, in classes, or on a one-to-one-basis.

The Indiana Chapter for Prevention of Child Abuse maintains a Child Abuse Resource Exchange line that provides information about prevention services.

## Indiana Child Abuse Risk and Evaluation System (I-CARES)

At the head of the list of recommendations made by the Commission on Abused and Neglected Children and their Families is the immediate initiation of the Indiana Child Abuse Risk and Evaluation System (I-CARES) for risk assessment. This computerized system is designed to address the needs of Indiana's child welfare system to document the progress of a case from intake to discontinuation of services. I-CARES is designed to provide caseworkers with guidance from experienced supervisors, as well as to assist with necessary record keeping. The system permits monitoring and review of a case at any point after it has been opened, and, according to the report, "has the potential to revolutionize the response capability of Indiana's child welfare system."[12]

Indiana is one of only three states that do not have a state-wide system for tracking perpetrators of child abuse and neglect. Under the present system, investigation begun by a county welfare office may stop when the family involved moves out of state or even to another county in Indiana. Further, schools and youth-serving agencies have no simple way to facilitate background checks on potential employees and volunteers. In many instances, abuse has continued after perpetrators moved to new settings. Although I-CARES was designed to be a risk-assessment and monitoring system, it has the capacity to create and maintain a history file. Complaints are entered into the system on the day received, and local records can be added to a consolidated history file maintained by the state. The system is designed with multiple levels of protection for the information base. I-CARES does not add any new data to that already collected, but it would assure that information is appropriately available to local caseworkers and supervisors when needed.

## Improving Services

The work of Indiana's Commission on Abused and Neglected Children and their Families emphasizes again the complex interconnections among child abuse and neglect and economic stress, health, and mental health status; family resources, and available services. Above all, the report acknowledges that **there is no way to bring about a quick fix of Indiana's child protection system.** Reform will require extensive and sustained commitment.

Indiana's youngest and most vulnerable citizens and the child welfare workers entrusted with their protection deserve far better support than they currently receive. The Commission report points out that the entire infrastructure authorized to protect Hoosier children must receive an infusion of well-trained, skilled professionals and fiscal resources, as well as new and creative ideas, if Indiana is to respond to the escalating emergency of child abuse and neglect.

## Notes:

1. Indiana Department of Public Welfare, *Building A System That Works For Everyone: Fiscal Year 1991 Annual Report* (Indianapolis: Indiana Department of Public Welfare, 1991); Indiana Department of Public Welfare, *A Graphic Overview of Indiana's Public Welfare Programs, Fiscal Year 1989* (Indianapolis: Indiana Department of Public Welfare, 1989).

2. M. Russell, *1987 National Study of Public Child Welfare Job Requirements* (Portland, ME: National Child Welfare Resource Center for Management and Administration, University of Southern Maine, 1988).

3. P. Lindsay, *National Study of Public Child Welfare Salaries* (Portland, ME: National Child Welfare Resource Center for Management and Administration, University of Southern Maine, 1988).

4. J. Perras, "$18 million bill to aid child welfare workers," *The Indianapolis Star* (January 29, 1990); S. Hanafee, "Advocates for abused children want more caseworkers hired," *The Indianapolis Star* (February 16, 1990), B-4; "Summary of Senator Sink's Child Welfare Casework bill," mimeo. (n.d. [1990]).

5. B. M., *et al.*, Plaintiffs, vs. Jeff Richardson, *et al.*, Defendants. CIVIL ACTION NO. 19 89-1054-C. *STIPULATION TO ENTER CONSENT DECREE FOLLOWING NOTICE TO THE CLASS.* Filed in U.S. District Court, Southern District of Indiana, Indianapolis Division, July 31, 1992; Legal Services Organization of Indiana, Inc. "To All Wards of the Marion County Welfare Department: *NOTICE CONCERNING SETTLEMENT OF CLASS ACTION* (Indianapolis, Indiana, July 31, 1992).

6. J. R. O'Neill, "Child welfare will fare better after settlement," *The Indianapolis Star* (July 7, 1992) B-1,5; Kenneth Falk, attorney for Legal Services Organization, conversation, July 20, 1992.

7. Indiana Commission on Abused and Neglected Children and their Families, *Child Abuse and Neglect: Indiana's Emergency* (Indianapolis: Indiana Commission on Abused and Neglected Children and their Families, December 1992), pp. i and ii.

8. Prevention of Child Abuse, Indiana Chapter of the National Committee, *Indiana State Plan for the Prevention of Child Abuse and Neglect* (Indianapolis: Indiana Child Abuse Prevention Council, 1992), p. ii.

9. This issue was discussed in greater detail in: Indiana Youth Institute, *Home-Based Family-Centered Services: A Response to the Child Welfare Crisis*. Occasional Paper No. 1 (Indianapolis: Indiana Youth Institute, 1991).

10. Indiana Youth Institute. *Home-Based Family-Centered Services.*

11. Indiana Youth Legislative Task Force, "1992 Legislative Session Wrap Up," *Indiana Youth Legislative Task Force* (Winter/Spring 1992), n.p.; Indiana Youth Legislative Task Force, *The Children's Digest, 1992* (Indianapolis, IN: Indiana Youth Legislative Task Force, 1992).

12. Commission on Abused and Neglected Children and their Families, *Child Abuse and Neglect: Indiana's Emergency*, p. 47.

## Building Active Minds

**Indiana's young people will have stimulating and nurturing environments that build on their individual experiences and expand their knowledge. Each young person will reach his or her own potential, gaining literacy and numeric skills that empower the lifelong process of asking questions, collecting and analyzing information, and formulating valid conclusions.**

Indiana Youth Institute
from *10 Blueprints for Healthy Development*

*Overall educational attainment in Indiana is lower than that for the nation as a whole. Three in four Hoosier adults over age 25 in 1990 had completed high school, but fewer than one in six had received at least a bachelor's degree. Indiana ranks 46th among the states on this indicator.*

BEST COPY AVAILABLE

# Highlights

*Overall, Indiana's schools have experienced declining enrollments for more than a decade. Enrollment change, however, has varied widely from one county to another.*

*Hoosier students do not do well on college entrance examinations that test higher-order thinking skills. Indiana's students consistently perform below the national average on the Scholastic Aptitude Test (SAT).*

*The annual dropout rates among Hoosier students in grades 7 to 12 have been falling steadily for the past four years. During the same period, however, the rate for students dropping out at grade 9 has increased.*

*Hoosier schools are making special efforts to meet needs of students considered "at risk" of school failure. "At risk" monies support 725 programs in Hoosier schools.*

# Education Introduction

Education reform remains as critical an issue for Americans in the 1990s as it was in the 1890s. At the end of the 19th century, the nation's economy was moving rapidly toward mass industry, and demands were placed on schools to provide individuals prepared to fill the new roles required to run the economy and manage the nation. Indiana did its part by producing the types of workers needed for the heavy industry that dominated the state's economy.

As the 21st century nears, the nation is again in the midst of fundamental change, this time from an industrial to a service economy. As was true a century ago, economic transformation is having a profound impact on family structure, the political system, and religious life. Indiana's schools are again being asked to provide individuals with the necessary skills and workforce preparation demanded by a vastly changed industrial sector and a growing service sector. When examined from the perspective of rapidly changing social roles, some of the educational concerns of the earlier period are remarkably similar to those facing Hoosier schools today:

- Making challenging, high-quality education affordable and accessible to all students regardless of racial, ethnic, geographic, and/or socioeconomic backgrounds.
- Bringing school policy and classroom procedures into line with state-of-the-art knowledge of child and adolescent development, including, where needed: restructuring of schools; revising the pre-service education of administrators and teachers and retraining those already in place; and giving up traditional practices such as tracking and ability grouping, corporal punishment,

and isolating persons with disabilities rather than integrating them in regular classrooms.

- Combatting and overcoming both blatant and subtle forms of sexism, racism, and negative attitudes toward the poor so as to create truly just school communities that prepare students for the diverse, multicultural worlds in which they will live.
- Revising and expanding curricular offerings and creating and strengthening community-based organizations and service opportunities to provide students with better preparation for life-long realities within their ever-changing workplaces and social worlds.
- Empowering students through balanced rights and responsibilities to be actively engaged in their own education and retaining them as healthy, competent, reliable members of their school communities until graduation.
- Recognizing that school is but one of many contexts in which young people learn and providing the vital links to families, churches, and nonformal community-based learning contexts that will persuade them to be dynamic, supportive partners in the education of young citizens.

These are daunting challenges confronting *all* the nation's many institutions and systems charged with creating and sustaining the well-being of American children, youth, and families. School systems have a vital role to play. The next three chapters examine Indiana's educational systems and programs, and, where data exist, provide comparative information from elsewhere in the nation.

## The National Education Goals

In September 1989, the governors of the 50 states called an historic education summit. During this conference, the governors established six national educational goals to be achieved by the year 2000 (see Box).[1] Indiana was among the first of 43 states to accept the challenge.[2] Governor Evan Bayh called upon every community in Indiana to adopt the six national education goals. He urged Hoosiers to establish community-wide strategies for achieving them and to develop reporting systems for measuring progress. The governor also asked communities to demonstrate readiness for creating and supporting radically redesigned schools that had potential to produce extraordinary gains in student learning.

The national education goals will shape reforms in educational policy and practice for the rest of the century. Although they contain implications for federal, state, and local roles in education, none of the goals can be achieved by educational institutions working in isolation from families, churches, businesses, and community organizations. The healthy development of young people is too complex for schools to accomplish alone. Children will learn wherever they are, in or out of school, and they learn best when they see consistency among the many learning contexts in which they participate.[3] The discussion that follows focuses on the *formal* educational system.

**The National Education Goals**

*Goal 1: Readiness for School*

By the year 2000, all children in America will start school ready to learn.

*Goal 2: High School Completion*

By the year 2000, the high school graduation rate will increase to at least 90 percent.

*Goal 3: Student Achievement and Citizenship*

By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so that they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

*Goal 4: Science and Mathematics*

By the year 2000, U.S. Students will be first in the world in science and mathematics achievement.

*Goal 5: Adult Literacy and Lifelong Learning*

By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

*Goal 6: Safe, Disciplined, and Drug-Free Schools*

By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

## Trends in Indiana

### School improvement efforts

Indiana's schools are facing the same challenges as American schools generally. As is true throughout the nation, education in Indiana is in a state of flux. Recommendations for change are coming from diverse sources, many of them outside of the Department of Education. Statewide testing and workforce development strategies have been mandated by the legislature. Community Leaders Allied for Superior Schools (CLASS) and COMMIT, Inc., have originated in the business community. Other innovations, such as the Middle Grades Improvement Program, have been supported by private foundations. Individual school corporations have tackled various problems on their own, and many schools have taken advantage of the flexibility and freedom to try out new ideas offered by the Discovery Schools program. The Step Ahead initiative (see Appendix A), which was created as one of the strategies of the governor's Life Long Learning program, encourages a collaborative approach to improving services available to the state's children and their families.

Many of the efforts to change Indiana's schools are either still in the proposal or planning stages or they are newly initiated. To date, very little information is available about student outcomes that can be attributed to the various strategies. The subject of educational improvement is complex. Assessing the merits of available options is beyond the scope of this general overview of education in Indiana.

### The good news

Educational change in Indiana as a topic of public debate is growing beyond educators to include parents, business and industry, communities at large, and students themselves. Hoosiers are grappling with issues as varied as school choice, accountability for learning outcomes, creating drug-free schools, and the preparation of students for changing workplaces. Some school systems already have been restructured and reorganized to incorporate growing knowledge of the ways children and adolescents learn best; other school systems are in the process of changing. Compensatory programs, such as Head Start for preschool education and Chapter 1 to support extra instruction for educationally disadvantaged students, can make a difference for some youngsters. Standardized achievement-test scores are inching upward. Dropout rates are falling, and postsecondary educational aspirations and enrollments are slowly rising. There is another side of the picture, however.

### The bad news

Many school corporations in Indiana face daunting problems. Operating costs are rising and current revenue sources frequently fail to meet demands. In some cases, apathetic communities continue to deny a need for change. Scores on college entrance examinations stubbornly remain below national averages. Although there has been improvement, still too many students leave high school prior to graduation. In addition, the numbers of young people who pursue postsecondary education are still below national averages, and too many of the state's college graduates continue to leave the state to pursue better career opportunities elsewhere.

## Information sources

*National Center for Education Statistics*. Although education statistics have been gathered nationally since 1869, states reported as they saw fit, if at all, prior to the 1950s. In the 1977-78 school year, a reporting system called the Common Core of Data was introduced by the National Center for Education Statistics (NCES). The object was a comprehensive and timely collection process for education data that would be similar to the systems in place in the Bureau of Labor Statistics and the National Center for Health Statistics. During the 1980s, massive cuts in the NCES budget curtailed the development of uniform reporting procedures. The agency still does not produce fully comparable, comprehensive, education data for the states. Consequently, it is necessary to rely on other information sources.[4]

*U.S. Census*. Every ten years, the U.S. Census collects data on enrollment status and the years of school completed by United States residents. Information on the educational attainment of adults older than age 25 used in this report comes from the 1990 census. Similar information is collected in the years between censuses in the Current Population Survey (CPS). Consistent with the problems discussed earlier, the sample of households on which Indiana CPS information is based seems to produce underestimates of the educational attainment of Hoosier adults. Because CPS data are widely reported, however, they are often used as the standard, despite their shortcomings at the state level.

*Indiana Department of Education*. Most of the information contained in the three chapters describing the status of education in Indiana comes from the Indiana Department of Education (IDOE). The IDOE has long struggled with the accuracy of data received from individual schools and corporations. In 1992, the department computerized the system for reporting education data statewide. Through IDEANET, student information can be transmitted electronically. This system allows school corporations to report less information but *gain* back more information derived from analysis of student data. Of course, confidentiality is maintained for all information about individual students.

At present, use of IDEANET is voluntary for school corporations. As more school corporations come on line, IDEANET will improve the accuracy of current state education statistics.[5] The IDEANET system provides immediate public access to comprehensive information about the state's public education system. Data are available for counties, school corporations, and individual schools. Information from the 1990 census for Indiana school corporations will be added to IDEANET in 1993.

## Challenges

Raising standards of comparability and accuracy in data collection is not the only challenge to a comprehensive understanding of education in Indiana. Some information is simply not collected For example, national studies have found socioeconomic status a more powerful predictor of educational success than variables such as gender and race/ethnicity. Until all school corporations are using the IDEANET system for data transmission, it will not be possible to assess the impact of family socioeconomic status on such outcome variables as individual achievement test scores, dropping out of school, future educational plans and career aspirations. Because of the complex interrelationships of socioeconomic status and racial/ethnic background, this report does not include tabulations that might lead to misleading conclusions about the impact of race/ethnicity alone.

There are other gaps in the information about Indiana's educational system, including:

- Evaluation data for "At Risk" programs to reveal what works best, and for whom.
- Long-term follow-up of the educational progress of students who have received services through compensatory programs such as Head Start and Chapter 1, as well as the educational progress of students eligible for these programs who did not receive the services.
- Analysis of the demographic characteristics of youngsters who have been designated as needing special education services, as well as the apparent shifts over time in categories of need.
- Comparison of educational outcomes among students who have and have not been bused to other districts under federal desegregation orders.
- Assessment of the impact of eliminating physical punishment in school corporations that have chosen this option.
- Assessment of the impact of statewide testing on retaining students in grade.
- Assessment of the impact of retention policies on patterns of school dropout.
- Differentiating in the dropout statistics between students who have voluntarily left school and those who have been expelled.

- Locating the barriers to returning to school and assessing their impact on students who have left school but wish to return.
- Assessing the impact of legislation that allows school officials to rescind work permits or driving licenses of students who are truant or not making appropriate school progress.

## Notes

1. U.S. Department of Education, *America 2000: An Education Strategy* (Washington, DC: U.S. Department of Education, 1991). In 1991, President Bush responded to the national education goals with *America 2000*, an education reform initiative based primarily in the private sector. While the education goals will continue to stimulate change in the nation's schools, the future of the *America 2000* program is uncertain.

2. L. Alexander, "AMERICA 2000: One Year Later," AMERICA 2000, No. 23 (March 30, 1992), p. 4.

3. F. A. J. Ianni. *The Search for Structure: A Report on American Youth Today* (New York: The Free Press, 1989).

4. M. H. Maier, *The Data Game: Controversies in Social Science Statistics* (Armonk, New York: M. E. Sharpe, Inc., 1991), pp. 67-68.

5. Center for School Assessment, Indiana Department of Education, *Educational Data and Information Technology Conference Handbook* (Indianapolis: Indiana Department of Education, January 14, 1992).

Chapter 6

# Indiana's Schools

## Elementary and Secondary Education

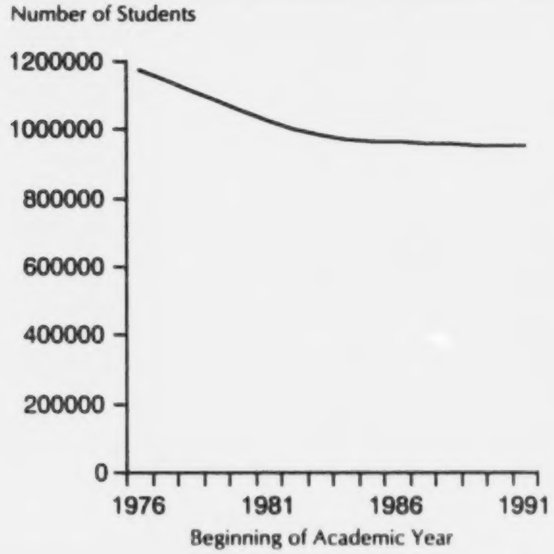
### Public schools

*Corporations.* In the 1991-1992 school year, Indiana had 296 regular school corporations, down from 304 just five years earlier. In the same period, the number of special education and vocational districts was reduced from 20 to 17, and the number of university-based schools from two to one. The number of school corporations remained stable in October 1992.

*Enrollment.* As Indiana's population relocated in urban/suburban areas within the state and baby-boomers left the state in large numbers, the school-age population both shifted geographically and declined in size. In the 1991-1992 school year, there were 955,676 students attending public schools in Indiana, almost a 7% decline since 1981-1982 when there were 1,025,172 enrolled. The 1991-1992 enrollment represents a 19% decline since 1976-1977 when there were 1,175,639 students enrolled in public education. This long-term decline reflects the lower birthrate following the end of the baby boom years in the mid-1960s, as well as the out-migration of young adults of childbearing years during the economic recession of the early 1980s. Figure 6.1 portrays the 15-year trend in school enrollments.

*Diversity.* Statewide figures on racial/ethnic diversity show Indiana's student population to be predominantly white and fairly homogeneous. The adults who teach them are an even more homogeneous group (Table 6.1).

**Figure 6.1 School Enrollment, Indiana, 1976 - 1991**



*Source*: Indiana Department of Education, Division of Special Education.

Children of color can have difficulty finding role models among Hoosier school personnel. Some may find school an inhospitable place, and such feelings may endure into high school. Many of the African-American students who responded to the Indiana Youth Poll expressed these sentiments. They also felt that their own cultural history was neglected in the current school curriculum.[1]

Although children of color made up a slightly larger proportion of the state's population under the age of 18 in 1990 than in 1980, this increase was not a consequence of growth, but of a smaller rate of decline than for the white population. Although families of color live in all 92 Indiana counties, most live in just five: Marion, Lake, Allen, St. Joseph, or Vanderburgh. Busing to achieve racial balance in the schools is confined to the state's largest urban areas. Many young, white Hoosiers have never attended school or interacted socially with peers from racial or ethnic backgrounds different from their own.

**Table 6.1 Ethnic Composition of Indiana Public Schools 1986, 1992**

| | Fall 1986-87 | | Fall 1991-92 | |
|---|---|---|---|---|
| | **Students** | **Teachers** | **Students** | **Teachers** |
| African-American | 10.69 | 5.66 | 10.92 | 5.43 |
| Asian- American | 0.57 | 0.13 | 0.68 | 0.15 |
| Hispanic/Latino | 1.68 | 0.37 | 1.88 | 0.43 |
| Native American | 0.12 | 0.05 | 0.14 | 0.06 |
| White | 86.94 | 93.93 | 86.37 | 93.93 |
| **Total** | **100.0** | **100.14** | **99.99** | **100.0** |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Department of Education.

This is particularly true for youths living in rural and suburban areas. Such isolation from the diversity that makes up our state and nation can perpetuate stereotypes and serve as an incubator for ignorance, prejudice, and discrimination.

## Adjusting to population change.

In the 1991-92 school year, there were 1,898 public schools in Indiana, nearly the same as the 1,909 that operated five years earlier. In 1989, the Department of Education began to classify public schools by geographic area, as metropolitan, suburban, town, and rural (Table 6.2). Over time, this classification will be helpful for understanding geographic trends. Public schools are structured in a variety of grade configurations (Table 6.3). Unfortunately, the current reporting system makes it difficult to follow trends in school restructuring. This is particularly true for the replacement of junior highs with middle schools to accommodate the educational needs of young adolescents.

**Table 6.2 Distribution of Indiana School Corporations by Geographic Area, October 1992**

| Area | Number | % |
|---|---|---|
| Metropolitan | 33 | 11.1 |
| Suburban | 65 | 21.9 |
| Town | 33 | 11.1 |
| Rural | 166 | 55.9 |
| **Total** | **297** | **100.0** |

*Source*: Indiana Department of Education.

Coping with population change provides a continuing challenge to the state's school corporations. Statewide population trends often do not apply at the local level. To plan accurately for future education needs, local communities must be aware of overall changes in population and be able to anticipate how population change will affect school enrollments. Cases in point are the 1980 to 1990 population shifts that took place in Hamilton and LaPorte counties. The areas served by the Hamilton Southeastern School Corporation and Carmel Clay Schools in Hamilton County experienced growth in overall population of

**Table 6.3 Indiana Public Schools, by Grade Configuration, 1986 - 1992**

| School Type | Fall 1986 | Fall 1992 |
|---|---|---|
| Elementary school | 1,140 | 1,142 |
| High school | 227 | 231 |
| Elementary and high school | 15 | 10 |
| Elementary and junior-high school | 222 | 223 |
| Junior-senior high school | 114 | 111 |
| Junior-high school | 111 | 97 |
| Special ed./voc. ed./alternative | 80 | 84 |
| **Total** | **1,909** | **1,898** |

*Source*: Indiana Department of Education.

83% and 32%, respectively, between 1980 and 1990. During this same decade, the growth in *school* enrollment in the Hamilton Southeastern area was only 28%, while the Carmel Clay area actually lost nearly 1% of its school children. The area served by New Durham Township schools in LaPorte County grew overall by 52%, but its school enrollment declined by more than a fourth (26%).[2]

School corporations have been affected differently by population changes. In some areas, as school enrollments have declined, neighboring school corporations have merged, with one community losing its school. Other school corporations failed to anticipate long-term changes in child population before expanding and are now faced with maintenance costs for school facilities that exceed their needs. A smaller number of corporations have outgrown their buildings or are faced with the need to replace obsolete structures. Such varied local trends are likely to continue. Demographer Jerome McKibben anticipates that as many as 30 additional school corporations will be facing high-school merger decisions by the year 2000, while a few others may need to build new schools to accommodate growth.[3] The Indiana State Board of Tax Commissioners, through control of the bond issue process, influences school planning options. Not surprising, some recent decisions have been controversial for local boards of education.

## State-operated Schools

The State of Indiana operates several schools for populations with special educational needs. These include Indiana School for the Deaf and Indiana School for the Blind in Indianapolis; Silvercrest Children's Development Center in New Albany; and Morton Memorial School at the Indiana Soldiers' and Sailors' Children's Home in Knightstown. The state also operates schools at the juvenile correctional facilities: Arthur Campbell School at the Indiana Youth Center and Charlton (Indiana Boys') School, both in Plainfield, and Eliza Hendricks (Indiana Girls') School in Indianapolis. There were 1,566 students attending state-operated schools during the 1991-92 school year.[4]

## Private Schools

In the 1990-91 school year, 742 private schools were operating in Indiana. Grade configurations varied from pre-kindergarten only to pre-kindergarten through grade 12. Individual school enrollments also varied widely, from a few dozen students to several hundred. Most of Indiana's private-school pupils attend schools affiliated with religious bodies (Table 6.4a). Catholic schools have more than half of the private-school enrollment, with Lutheran schools running a distant second.

In the 1991-92 school year, 98,855 young Hoosiers were enrolled in private schools within the state. This enrollment amounted to 9% of the state's students in pre-kindergarten through grade 12. Enrollment in private schools has remained steady, at just under 10%, since the 1980s. Growth of private education will be influenced by the outcomes of "school choice" initiatives now under consideration in the state. The proportion of children attending private schools is highest at the pre-kindergarten level, declines in kindergarten and, following a slight rise in grade 1, continues to decline with each succeeding grade level thereafter (Table 6.4b).

## Home-schooling in Indiana

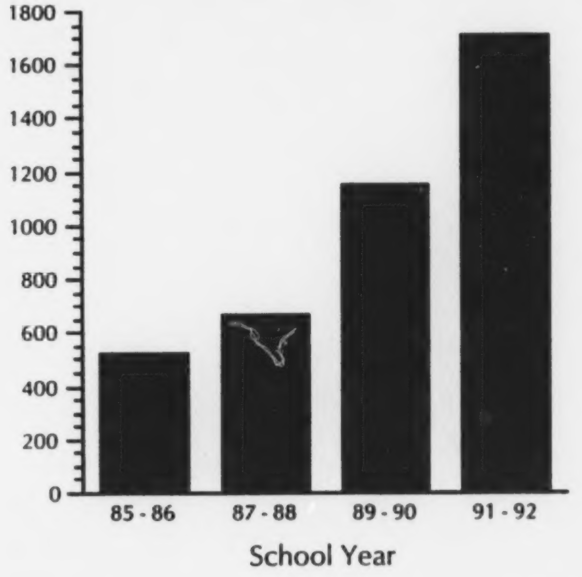
Although all 50 states have laws that compel children to attend school until they attain a legal age for dropping out, state laws vary regarding what constitutes a "school." According to Indiana law, children must attend either a public school "or some other school which is taught in the English language."[5] Martha

**Table 6.4a & 6.4b Indiana Private School Enrollment, by Affiliation and Grade, 1991 - 1992**

| **a. School Affiliation** | **Number** | **%** |
|---|---|---|
| Catholic | 54,861 | 55.5 |
| Lutheran | 9,960 | 10.1 |
| Baptist | 5,925 | 6.0 |
| Amish | 3,784 | 3.8 |
| Other Protestant denominations | 5,171 | 5.2 |
| Christian Inter-/nondenominational | 3,928 | 4.0 |
| Jewish | 490 | 0.5 |
| Other affiliation | 7,426 | 7.5 |
| Not affiliated | 7,310 | 7.4 |
| **b. Grade Level** | | |
| Pre-kindergarten | 10,017 | 10.1 |
| Kindergarten | 8,519 | 8.6 |
| Grade 1 | 8,974 | 9.1 |
| 2 | 8,521 | 8.6 |
| 3 | 8,299 | 8.4 |
| 4 | 8,075 | 8.2 |
| 5 | 7,990 | 8.1 |
| 6 | 7,552 | 7.6 |
| Ungraded elementary | 470 | 0.5 |
| Grade 7 | 6,630 | 6.7 |
| 8 | 6,373 | 6.4 |
| 9 | 4,629 | 4.7 |
| 10 | 4,305 | 4.4 |
| 11 | 4,070 | 4.1 |
| 12 | 3,688 | 3.7 |
| Ungraded secondary | 546 | 0.6 |
| Other | 197 | 0.2 |
| **Total** | **98,855** | **100.0** |

*Source*: Indiana Department of Education.

**Figure 6.2 Number of Indiana Children Registered in Home Instruction**



*Source*: McCarthy, "Home Schooling;" Indiana Department of Education.

McCarthy, professor of education law and policy at Indiana University-Bloomington, states in a recent article on home-schooling, that an increasing number of Hoosier families have chosen to educate their children at home. This option meets Indiana's legal requirement of "some other school." McCarthy notes further that the numbers of registered home-schoolers in Indiana have more than tripled since 1985 (Figure 6.2) and that these figures "may underestimate the actual number, as some parents may not report that they are schooling their children at home."[6] During the 1991-92 school year, 1,945 young Hoosiers were taught at home.

To remain within the law, Hoosier parents must see that their children are receiving an education equivalent to that given in public schools. The law also requires that children be instructed for the same number of days they would attend if enrolled in a public school. Further, the law permits legal action against parents if a local superintendent believes that home-schooled children in her or his jurisdiction are not receiving equivalent education. Parents who choose home-schooling for their youngsters are supported by a number of private-sector organizations that supply curricular materials and guidance on teaching strategies.

According to McCarthy, most parents who withdraw their children from formal schooling do so for religious reasons, often to isolate them from possible exposure to "secular humanist" or "New Age" ideas. Other parents feel that academic standards in the public schools are not sufficiently challenging, while still others attempt to shield their children from drugs, alcohol, and violence in school settings. A few choose the home-school option because they live in geographically isolated areas, and other parents simply want closer relationships with their children. Indiana continues to have few specific guidelines regulating practice. A bill calling

BEST COPY AVAILABLE

for extensive regulation of home-schooling was dropped by the Indiana legislature during the 1992 short session. McCarthy feels that the number of children being educated outside public or private schools is likely to grow and that "policymakers face difficult decisions in striking the balance between state and individual interests." The place of home-schooling in the various school choice plans being debated has yet to be clarified. Further, the state has not addressed home-schools relative to such aspects of the 1992 workforce development legislation as the gateway exam and career plan development scheduled for statewide implementation in grade 10 by the 1994-95 school year (see Chapter 8).

## The Middle-grades Movement

Since the late 1970s, interest has heightened in the special educational needs of young adolescents—10-to-15-year-olds in grades 5 to 9—for the first time since the junior-high school "solution" gained currency in the early decades of the 20th century. Attitudes formed toward self, others, and society in general—as well as academic and behavioral choices made during this period of intense physical, intellectual, emotional, and social change—will have lifetime impact. Proposals for school restructuring and educational improvement have grown as a result of increased understanding of the special needs of this age group. Further impetus for change has come from growing understanding of the ways that some standard school practices actually undermine healthy developmental progress. In 1989, the Carnegie Council on Adolescent Development Task Force on Education of Young Adolescents published *Turning Points*, a study of education provided to young adolescents. This report followed earlier research at the Center for Early Adolescence at the University of North Carolina. Several recommendations for transforming middle-grade schools emerged from these investigations.[7]

- *Create* small communities for learning where stable, close, mutually respectful relationships with adults and peers are considered fundamental for intellectual development and personal growth.
- *Teach* a core academic program that results in students who are literate, including in the sciences, and who know how to think critically, lead a healthy life, behave ethically, and assume the responsibilities of citizenship in a pluralistic society. Youth service to promote values for citizenship is an essential part of the core academic program.

## Lilly Endowment Inc.'s
## Middle Grades Reading Improvement Program

In 1989, concerned about the critical importance of reading achievement in the lives of young adolescents, particularly those young people living in poverty, Lilly Endowment Inc. undertook a program of grantmaking to promote youth literacy in Indiana. The ten reading improvement projects that have received support from the Endowment have made significant contributions to the lives of the students in the 140 middle-grade schools eligible to participate, as well as to their communities and the state as a whole. The Middle Grades Reading Program targeted those youths with greatest need by focusing efforts on the 53 Indiana school corporations with the largest concentrations of young people living in poverty.

Through the Middle Grades Reading Program the Endowment has been able to raise awareness and concern for the reading needs of this age group; stimulate the development of critical resources to address the special needs of teachers, school administrators, public librarians, and youth-service professionals; and provide staff development to these audiences. Of particular note, the Middle Grades Reading Program has done much to stimulate young adolescents' voluntary reading habits. School bookshops and exciting new reading collections put enticing reading materials in young people's hands, while a number of creative and innovative projects assist teachers, parents, and school and public librarians to work together in new ways to encourage young people to develop the reading habit. The following is a list of the ten projects that form the Middle Grades Reading Program, with a brief description of their purposes and activities and the name of the grantee for each project.

### Middle Grades Reading Program Projects

***Books for Rural Youth Access*** provides books for use by students in the library media centers of 22 rural schools and stimulates voluntary reading habits critical to promoting reading success. (Indiana Department of Education)

***Building Comprehensive Literacy Learning Supports*** introduces two new and important literacy resources to Indiana audiences—*Literacy Assessment for the Middle Grades and Building Youth Literacy: A Training Curriculum for* Community Leaders—and will build the capacity of middle-grades teachers, youth service professionals, and staff development specialists to use these tools. (Center for Early Adolescence, University of North Carolina)

***Marketing Reading in Indiana*** raised statewide awareness of young adolescents' literacy needs through a massive marketing campaign that focused on the positive theme: "Enter the Theater of the Mind. Read. Because Only Reading Makes It Real." Using this theme, the campaign disseminated information statewide through television and radio announcements, billboards, calendars, posters, and newspaper ads. (Indiana Youth Institute)

***Opening Doors*** targets the 60 public library systems that serve students in 140 middle-level schools. Services will be expanded to young adolescents by providing the public libraries with a core collection of books, with staff development for public librarians, with the first statewide summer reading program for young adolescents in Indiana, and with awards that recognize outstanding services and programs to public libraries. (Indiana Library Federation)

***Parents Sharing Books*** encourages middle-level students and their parents to share ideas and interests with each other over books they read together. Training, manuals and books are provided. The program is now in 57 of the targeted schools. (Indiana University)

***Reading Excitement and Paperbacks*** provides grants to schools to establish a recreational reading collection and to implement activities integrating independent reading in the classroom. The program is in 59 schools and six community agencies. (Indiana Department of Education)

***Reading for Real*** is a literature-based reading program that provides young adolescents with satisfying reading experiences and with opportunities to explore important ideas about what it means to be caring and responsible and to respect oneself and others. Pilot programs are in five of the 140 schools. (Developmental Studies Center)

***SOAR (Stimulating Opportunities for Adolescents to Read)*** brings reading teachers, library media specialists, and public librarians together for summer retreat sessions, at which they engage in a process of reading and sharing ideas to increase the quantity and quality of the time young adolescents devote to reading. (Indiana University)

***Student-Operated Paperback Bookshops*** provides direction and financial support to establish student-operated paperback bookshops. Students select, order, inventory, and market the paperbacks. They organize, schedule, promote, and equip their bookshop by any plan they deem useful to their schools. The program is in 60 schools. (Indiana State University)

***Teachers Under Cover*** stimulates reading for personal enjoyment among middlegrades teachers. Teachers select books of their choice and meet, usually in a nonschool setting, to discuss the books. There are Teachers Under Cover groups in 65 schools. (University of Southern Indiana)

In addition to the ten projects listed here, Lilly Endowment Inc., has sponsored conferences, provided technical assistance, and made provision for evaluation.

Source: J. Humphrey, *A Study of Reading in Indiana.*

- *Ensure* success for all students through elimination of tracking by achievement level.
- *Empower* teachers and administrators to make decisions about the experiences of middle grade students.
- *Staff* middle grade schools with teachers who are expert at teaching young adolescents and who have been specially prepared for assignment to the middle grades.
- *Improve* academic performance through fostering the health and fitness of young adolescents.
- *Re-engage* families in the education of young adolescents.
- *Connect* schools with communities, which together share responsibility for each middle grade student's success.[8]

In 1989, the Indiana Department of Education gathered information about middle-level education through a survey sent to all 445 schools in the state that housed students in grades 5 through 9. Results from 243 responding schools revealed that much remains to be done to implement sound middle-grade practices. The survey found that:

- Nearly two-thirds of the schools still practiced some form of ability grouping.
- Nearly half indicated that staff had not received any type of inservice training specifically related to middle-school education.
- Fewer than half of the schools had any type of block scheduling.
- Only a third of the schools used interdisciplinary teaching.
- Of those schools using interdisciplinary teaching, only a third offered a separate preparation period for the teachers involved.
- Only a fourth of the schools had advisor/advisee programs.

The encouraging news is that the middle-grades reform movement is gaining momentum in Indiana.[9] Lilly Endowment supports a diverse group of innovative approaches to education for early adolescents through the Middle Grades Improvement Program (see Box).[10] Indiana also received a grant from the Carnegie Corporation of New York to study, evaluate, and explore the implementation of the *Turning Points* recommendations. A diverse group of educators and professional youthworkers from across the state met for two years as the Indiana Middle Level Task Force. Their report, *Betwixt & Between*, offers a comprehensive set of recommendations for reforms in the areas of educational policy and legislation, curriculum content and classroom practice, preservice preparation and inservice development for teachers and administrators, elimination of tracking, health promotion, coordination of services and collaboration among service providers, and greater involvement of families and communities as partners in the education of young Hoosiers.[11]

## Educational Attainment

The number of years of school completed by the adult population exerts a powerful influence on a state's overall economic well-being. U.S. Census data show clearly that education has a stronger positive impact on income distribution than does any other factor. According to a recent announcement, "the way most Americans increase their income is by getting more education."[12] The 1980s particularly provided financial benefits for individuals who had completed four years of college or more.[13] Further, the proportions of high-school and college graduates become selling points when a state seeks to attract new industries.

Indiana has cause for concern about the educational attainment of adult Hoosiers. In 1990, the state ranked 31st among the 50 states and the District of Columbia in the proportion of residents over age 25 who had graduated from high school (75.6%). Indiana ranked 46th in the proportion with at least a baccalaureate degree (15.6%). Of the five neighboring states, often in direct economic competition with Indiana in recent years, only Kentucky residents had lower educational attainment (Table 6.5).[14] Although the educational attainment of adult Hoosiers in 1990 represented considerable improvement over what it

**Table 6.5 Educational Attainment of Persons Age 25 Years and Over, United States, Indiana, and Neighboring States, 1990**

| | High School Graduate or Higher | | BA Degree or Higher | |
|---|---|---|---|---|
| | % | Rank* | % | Rank* |
| United States | 75.2 | | 20.3 | |
| **Indiana** | **75.6** | **31.0** | **15.6** | **46.0** |
| Illinois | 76.2 | 28.5 | 21.0 | 20.0 |
| Kentucky | 64.6 | 50.0 | 13.6 | 49.0 |
| Michigan | 76.8 | 25.0 | 17.4 | 37.5 |
| Ohio | 75.7 | 30.0 | 17.0 | 40.0 |

*Among 50 states and District of Columbia

*Source*: U.S. Bureau of the Census.

was in 1970 and 1980, years of school completed remained well below national averages at the higher levels (Table 6.6).

**Table 6.6 Years of School Completed by Indiana Population, Age 25 Years and Older, 1970 - 1990**

| Number of Years | Indiana 1970 % | Indiana 1980 % | Indiana 1990 % | U.S. 1990 % |
|---|---|---|---|---|
| Elementary (0-8) | 26.6 | 16.6 | 8.5 | 10.4 |
| High School | | | | |
| 1-3 years | 20.5 | 17.1 | 15.8 | 14.4 |
| 4 years | 36.1 | 41.7 | 38.2 | 30.0 |
| College | | | | |
| 1-3 years | 8.5 | 12.1 | 21.9 | 24.9 |
| 4 or more year | 8.3 | 12.5 | 15.6 | 20.3 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** |

*Source*: U.S. Bureau of the Census.

Educational attainment varies by race/ethnicity, both in Indiana and in the United States as a whole. The differences in years of schooling completed have an impact on the income differences discussed in Chapter 2. Educational attainment in Indiana presents a complex picture. Smaller proportions of white adult Hoosiers than white adult Americans generally had graduated from high school and received bachelor's or postgraduate degrees. In contrast, Asian-Americans in Indiana had the highest educational attainment of all racial/ethnic groups reported and were consistently well above the national averages. Smaller proportions of Indiana's remaining nonwhite racial/ethnic groups had graduated from high school or received bachelor's, graduate, or professional degrees than was true for Hoosier whites. Compared with the nation as a whole, however, higher proportions of Hoosier adults identified as of "other" races, and higher proportions of Hoosier Hispanics/Latinos were high-school and college graduates and held graduate and professional degrees (Table 6.7).

**Table 6.7 Educational Attainment of Persons Age 25 Years and Over, United States and Indiana, by Ethnic Group 1990**

| | High School Graduate | | BA Degree or Higher | | Graduate or Professional Degree | |
|---|---|---|---|---|---|---|
| | **Indiana** | **U.S.** | **Indiana** | **U.S.** | **Indiana** | **U.S.** |
| All persons | 75.6 | 75.2 | 15.6 | 20.3 | 6.4 | 7.2 |
| White | 76.5 | 77.9 | 15.8 | 21.5 | 6.4 | 7.7 |
| African-American | 65.4 | 63.1 | 9.3 | 11.4 | 3.6 | 3.8 |
| Native American | 65.0 | 65.5 | 8.4 | 9.3 | 3.5 | 3.2 |
| Asian-American | 85.8 | 77.5 | 53.1 | 36.6 | 30.8 | 13.9 |
| Other races | 56.3 | 43.4 | 7.5 | 6.0 | 2.5 | 1.9 |
| Hispanic/Latino | 62.6 | 49.8 | 10.8 | 9.2 | 4.3 | 3.3 |

*Persons of Hispanic origin may be of any race.

*Source*: U.S. Bureau of the Census.

## Notes

1. J. B. Erickson, *Indiana Youth Poll: Youth's Views of High School Life* (Indianapolis: Indiana Youth Institute, 1991) pp. 26-27.

2. Data sources were the Population Studies Division, Indiana Business Research Center, Indiana University and the Indiana Department of Education.

3. J. McKibben, Indiana Business Research Center. Presentation to Seminar sponsored by the Indiana Education Policy Center (Indianapolis: Indiana University School of Public and Environmental Affairs, March 1992).

4. Indiana Department of Education, 1991-92 Total Enrollment by Affiliation.

5. Indiana Code Ann. § 20-8.1-3-17, 1991. Cited in M. McCarthy, "Home Schooling and the Law," *Policy Bulletin*, No. PBB-B15 (September 1992), p. 4.

6. McCarthy, "Home Schooling," p. 4.

7. This interest gained impetus with the publication of Joan Lipsitz's pioneering work, *Growing Up Forgotten: A Review of Research and Programs Concerning Early Adolescence* (New Brunswick, NJ: Transaction Books,

1980) and Lipsitz's and colleagues' continuing work at the Center for Early Adolescence established at the University of North Carolina in 1978. Additional works on educational reform for early adolescents include: J. Lipsitz, *Successful Schools for Young Adolescents*, New Brunswick: Transaction Books, 1984; G. Dorman, *Improving Middle-Grade Schools: A Framework for Action* (Carrboro, NC: Center for Early Adolescence, University of North Carolina at Chapel Hill, 1987); Carnegie Council on Adolescent Development Task Force on Education of Young Adolescents. *Turning Points: Preparing American Youth for the 21st Century*. Washington, DC: Carnegie Council on Adolescent Development, 1989.

8. Carnegie Council Task Force on Education for Youth Adolescents, *Turning Points*, p. 36ff.

9. Just before *The State of the Child in Indiana, II* went to press, a new report was received from the Education Writers Association. This report will bring national attention to Indiana's middle-grades movement: G. H. Mancini, *Gentle Ambitions: Indiana's Thoughtful Middle Grades Movement* (Washington, DC: The Education Writers Association, 1993).

10. Summarized in J. Humphrey, *A Study of Reading in Indiana Middle, Junior, and Senior High Schools*, Occasional Paper No. 4 (Indianapolis: Indiana Youth Institute, March 1992), pp. 34-5.

11. Middle Grades School State Policy Initiative Project Task Force , *Betwixt & Between* (Indianapolis: Indiana Department of Education, Center for School Improvement and Performance, 1991).

12. U.S. Bureau of the Census Press Release, "Education has More Positive Effect than Other Factors on Income Distribution, Census Bureau Researchers Find" (Washington, DC: Economics and Statistics Administration, Bureau of the Census, U.S. Department of Commerce, October 1992), p. 1.

13. J. B. Steinberg, D. W. Lyon, and M. E. Vaiana, eds. *Urban America: Policy Choices for Los Angeles and the Nation* (Santa Monica, CA: RAND, 1992), p. 67.

14. The reported figures on educational attainment come from responses to the long-form questionnaire of the 1990 U.S. Census, completed by about 15% of Hoosier households. Educational attainment is another area in which the annual Current Population Survey, based on responses from fewer than 500 Indiana households, does not provide an accurate estimate.

Chapter 7

# Assessing Hoosier Education

In this chapter, two approaches to measuring Hoosier education are used: examination of trends within Indiana and comparison of Indiana with other states in the nation. Both strategies are affected by the comparability of the data available.

## Indiana's Declining Dropout Rate

Indiana is making progress in reducing the number of young people who leave school prior to high-school graduation.[1] In 1988-1989, the annual dropout rate was 4.82 per 100 students in grades 7 through 12. By the 1991-92 school year, the annual rate had fallen to 3.19, a 34% decline in four years. This reduced rate still meant that 13,402 young people dropped out of Indiana's public middle, junior-, and senior-high schools that year.[2] If Indiana follows national trends, as many as half of these young dropouts may return to complete high-school requirements or earn high-school equivalency certificates (GEDs) within four years of the time they should have graduated.[3] Still others may complete high school later in adulthood.

Indiana uses another procedure for analyzing dropout information. The four-year cohort survival ratio follows students from the fall that they enter grade nine through the end of the spring term four years later. At this time, if normal progress has been made, they should graduate. The same encouraging trends appear in these figures. In 1982, fewer than three-fourths of Hoosier students graduated from Indiana public high schools in four years. By 1992, the figure had risen to 82.5%, up from 81.1% just one year earlier.[4] If Hoosier schools can sustain this pace of improvement, Indiana may be able to reach the national education goal of a 90% high-school graduation rate by the year 2000.

Indiana's improved graduation figures mask the fact that rates vary widely from one county to another. Several counties had already attained 90% or higher graduation rates at the end of the 1991-92 school year. In Howard County, for example, 93.2% of the students in grade 9 in the fall of 1988 persisted until they graduated four years later. Graduation rates were nearly as high in Warren (92.7%), Ohio (91.6%), and Hancock counties (91.6%). More than nine in ten students graduated in Spencer (91.0%), Fountain (90.5%), and Benton (90.2%) counties, as well. At the other end of the continuum, however, more than one in three students in Franklin County left school prior to graduation, the lowest graduation rate in the state, at 65.1%. Fewer than seven in ten students graduated in Fayette (69.0%) and LaPorte counties (69.4%).[5] If all of Indiana's high schools are to reach the national education goal, more must be learned about local factors that affect graduation rates.

***Low income, limited parental education, and single-parent households have been identified as factors contributing to the dropout rate.***

## Some Characteristics of Dropouts

National studies provide insights concerning the complex web of interrelated family background factors that contribute to dropping out of school. Census data have shown consistently that income levels rise with increased educational levels. Census data have also shown that changing from a married-couple to a single-parent household is the most common way that income is decreased among American families.[6] Household composition and parental education influence household income. All these factors are related to dropping out of school.

An analysis of data from the National Education Longitudinal Study begun in 1988 (NELS:88) compared the relationship of various personal and family background factors with dropping out of school between grades 8 and 10. Phillip Kaufman of MPR Associates, Berkeley, California, calculated the strength of various factors using "odds ratios," that is, the relative odds of a group dropping out compared to a reference group. In examining the odds ratios for gender, race/ethnicity, and socioeconomic status, he found that, when each factor was controlled for the other two factors, only socioeconomic status (SES) achieved statistical significance.[7]

Kaufman found that young people from the lowest socioeconomic group were more than three and one-half times as likely to have dropped out by grade 10 than those from the middle SES group. Those from the highest SES group were only about a third as likely to have dropped out as those from the middle SES group.

When Kaufman looked at the impact of race/ethnicity (controlling for gender and socioeconomic status), the figures were not statistically significant. His work, based on individual student data, shows the strong influence of socioeconomic status on dropout patterns. The Indiana Department of Education (IDOE) reports student dropout data by race/ethnicity, but not by socioeconomic status. These figures do show that with the exception of Asian-Americans, students of color are more likely to drop out of school than white students. The IDOE also reports information on school corporations, however, that are very much in line with Kaufman's findings.

***The strongest influences on graduation in Indiana school corporations were socioeconomic factors, a testament to the powerful impact of poverty on children.***

The strongest influences on graduation rates in Indiana school corporations were all socioeconomic factors: the proportion of single-parent families, socioeconomic status, and the proportion of families below poverty level. The percentage of minority students enrolled in the corporation had a weak influence on graduation rates.[8] These data lend support to the view that higher dropout figures for Indiana's students of color reflect not race/ethnicity factors, but the powerful impact of poverty.

Kaufman found additional factors related to dropping out: family composition (single parent vs. two parents), level of parental involvement with the school, parents' educational expectations for their children, and the number of older siblings who had dropped out. Another powerful predictor was whether the student was overage for grade level. Students older than normal for their grades were more than seven times as likely to drop out than students who were not.

## 9th-grade dropouts

An examination of the past few years of school enrollment and dropout data for the state of Indiana revealed a disturbing trend. In the 1988-89 school year, the largest percentage of dropouts occurred as expected, in grade 10—the year when students making normal progress typically reach age 16. With each school year since 1988-89, however, the

**Table 7.1 Indiana High-School Dropouts**

| Grade | 1988-89 (%) | 1989-90 (%) | 1990-91 (%) | 1991-92 (%) |
|---|---|---|---|---|
| 7 | 2.0 | 2.7 | 1.4 | 0.9 |
| 8 | 4.8 | 4.7 | 3.2 | 2.6 |
| 9 | 21.2 | 23.4 | 26.5 | 27.2 |
| 10 | 25.7 | 23.1 | 24.8 | 25.2 |
| 11 | 26.7 | 26.0 | 24.1 | 25.3 |
| 12 | 18.9 | 19.8 | 19.6 | 18.4 |
| Ungr. | 0.7 | 0.4 | 0.4 | 0.4 |
| **Total** | **100.0** | **100.1** | **100.0** | **100.0** |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Department of Education.

percentage of dropouts leaving school in grade 9 has risen (Table 7.1). This raises the issue of whether the relationship between being overage for grade and dropping out found by Kaufman in the NELS:88 national data is true for Indiana as well. Many of the young Hoosier dropouts were overage for grade 9, either because they were retained one or more times during their elementary and junior-high school years, or because they remained classified as 9th-graders for two or more years for failing to earn enough credits to achieve 10th-grade status.

Data for several individual school corporations showed that the increase in 9th-grade dropouts was not uniform across the state. Variation in patterns of dropping out raises questions about what is done differently from one corporation to another. There is much more to be learned about the impact on dropping out caused by current state and local educational policies and practices (particularly those related to retention, promotion, and school/grade organization). Much is also to be learned about how the relationships of family, school, and community supports and barriers affect young people's decisions to remain in school, drop out, and return to school or pursue GED certification.

## Some implications

Thirty-one percent, or 4,116 of the young people who dropped out in 1991-92, left school with less than a 10th-grade education. The 1992 Indiana legislature created legislation for workforce development, including plans to restructure the state's high schools. Hoosier educators are being asked to design new curricula based on perceived needs for better and more appropriately trained entrants into the state's workforce. Key elements in current planning for workforce development are the 10th-grade "gateway examination" and development of a career plan for each student. If current trends in dropping out prior to grade 10 continue, many young people will have left school before they can benefit from diagnostic testing and career preparation, thereby undermining the state's plans to enhance workforce readiness.

## Reasons for dropping out

Two quite different sources of information are available concerning why students drop out of school in Indiana. The Department of Education compiles data from exit interviews completed by students at the time they leave. The Indiana Youth Poll, conducted by the Indiana Youth Institute and published in 1991, offers additional insights.[9]

*Exit interviews.* The Indiana Department of Education requires that a school staff member conduct an exit interview with each young person leaving school before age 18. In recent years, the major reasons given for their decisions have remained fairly constant. Leading their lists has been lack of interest in the curriculum, followed by a related factor, school failure, and then, the need or desire to go to work.

**Student respondents to the Indiana Youth Poll attributed dropping out of school to such factors as lack of interest, emotional problems, pregnancy, and a desire or need to work for pay.**

Another category actually ranks second on the Department of Education lists: "rebellious, incorrigible." This categorization is difficult to interpret since it seems unlikely that exiting students apply such terms to themselves. One possible explanation is that this represents the subjective opinion of a school administrator based upon her or his understanding of the situation. Among these youths are undoubtedly those who have been adjudicated because of truancy and actually declared "incorrigible" by the court. Some may also be students more accurately described as "pushouts" than dropouts. Information about young people who may have been encouraged to leave school is not available since Indiana no longer compiles and reports state-level expulsion data.

*The Indiana Youth Poll.* The Indiana Youth Poll approached the dropout issue differently. The poll asked respondents for their perceptions of why fellow students left school before graduation. A lack of interest in the curriculum was identified as the primary reason for dropping out. Beyond curriculum, however, youth poll respondents offered other insights. They felt that emotional problems (interpersonal problems and low self-esteem), followed by pregnancy and a desire or need to work for pay, were more probable reasons for dropping out (Table 7.2). Rebelliousness and incorrigibility accounted for only about 3% of their responses (lending support to our earlier contention that these terms are unlikely to be applied by students to themselves or peers).

**Table 7.2 Why Students Drop Out of School**

| | Youth Poll Participants (%) | Actual Reasons Given at Exit 1988-1989 (%) |
|---|---|---|
| Lack of interest in curriculum | 33.2 | 47.4 |
| Pregnancy | 12.5 | 3.5 |
| Marriage | 1.0 | 1.2 |
| Interpersonal problems | 8.1 } 14.8 | 1.7 |
| Low self-esteem, losers | 6.7 | |
| Poor home environment, family problems | 7.5 | 3.5 |
| Record of school failure | 7.2 | 7.4 |
| Want to work, want money | 6.4 } 12.5 | 5.8 |
| Need to work to support family | 6.1 | |
| Drug, alcohol problems | 5.4 | 1.2 |
| Rebellious, incorrigible | 2.6 | 17.0 |
| Friends, peer pressure | 2.4 | .7 |
| Armed service enlistment | - | .2 |
| To seek vocational training | - | .2 |
| Other | 1.0 | 4.1 |
| Unknown | - | 5.9 |
| **Total Number of Reasons Given** | **925** | **20,898** |

*Source*: Indiana Youth Institute, 1990; Indiana Department of Education.

## Dropping Back In

Some students who have dropped out of school come to realize, on their own, that they are short-changing themselves. Other dropouts need stronger encouragement and more support if they are to return to school. How many young people return to school? How difficult is it to do so? Unfortunately little information related to these issues is available. The Department of Education data reveal that 4% of the 1990-91 students leaving school had dropped out at least twice in a single year. Although the youth poll did not gather systematic data, follow-up discussions with students provided disturbing anecdotal information. *From a student view-*

*point*, some schools appear to erect formidable bureaucratic and social barriers to returning to school. All of the following were cited:

- Arbitrary deadlines.
- Refusal to readmit to day schools, which provide transportation, but lack of transportation provided to night schools out of district.
- Tuition payment required if student wishes to remain within home district for either day or night school.
- Difficulties in finding out about the few alternative educational options that do exist.
- Attitudes of other students toward former dropouts.
- Lack of day care for children of students.

Many school corporations are addressing effectively one or more of these obstacles to completing high school by providing alternative school settings and daycare for students' children. One of Indiana's strategies for achieving the national education goal of at least a 90% high-school graduation rate is the retrieval of dropouts. Not widely enough known is the legal provision that a dropout may re-enter *any* Indiana public secondary school after one year.[10] The Indiana state attendance officer maintains lists of names and last known addresses of all Indiana high-school dropouts. Authorized agencies seeking to further the education of such individuals may apply for access to these lists by contacting the state attendance officer.

Much is already known about dropout prevention. This information, as well as what is known about the retrieval of dropouts, must be applied more widely. Although Indiana is making progress, more information is needed about effective strategies to help re-entering students overcome both real and perceived barriers to completing high school.

## Standardized Testing

### International comparisons

Americans generally want to know how their nation compares with other nations, their state with other states, and their community with other communities. In perhaps no other arena of children's lives is the demand for ranking more common than in educational progress. Since the 1950s, when Americans were shaken into examination of their schools following unexpected Soviet achievements in space exploration, educators have been challenged to develop and refine valid and reliable indicators that will tell how American students measure up. Standardized tests have become the most commonly used vehicle for this purpose.

Recent international comparisons of the proficiency of United States students are not encouraging. While educators continue to debate the validity of cross-national achievement research, studies have reached similar conclusions: Students in the United States lag behind their counterparts in most industrialized nations and in a few developing nations. A twenty-nation study conducted by the Educational Testing Service found that American 13-year-olds outscored only those from Brazil, Jordan, Mozambique, and Portugal in mathematics. In science they outscored only students from these countries and Ireland. Among the fourteen nations participating in the science assessment for nine-year-olds, however, U.S. students were near the top, behind only Italy, Korea, and Taiwan. The picture for mathematics was less promising; U.S. nine-year-olds performed better than students in only two countries, Portugal and Slovenia.[11]

## State-by-state comparisons

In 1983, the nation was again jarred to attention by a report from the National Commission on Excellence in Education entitled, *A Nation At Risk: The Imperative for Educational Reform*. The report included the now-familiar statement:

> If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. As it stands, we have allowed this to happen to ourselves. We have even squandered the gains in student achievement made in the wake of the Sputnik challenge. Moreover, we have dismantled essential support systems which helped make those gains possible. We have, in effect, been commiting [*sic*] an act of unthinking, unilateral educational disarmament.[12]

This commission report spurred educational policymakers and administrators to seek new ways to restructure and reform educational processes and delivery systems. It also stimulated changes in the way the nation collected and reported statistical data describing educational inputs and outcomes. In 1984, Secretary of Education Terrel Bell issued the first of a series of "wall charts" as part of a renewed effort to provide comparable educational indicators for each of the states. The charts sparked debate about the validity of the measures chosen and the consistency of definitions used by various states to produce statistical indicators, such as per capita investment in education, dropout rates, and graduation rates. In spite of such questions, however, comparisons among states are made anyway.

## Nationally normed tests

Scores on nationally normed tests are one comparative measure. The record of Indiana students on standardized tests is mixed. The Indiana Statewide Testing for Educational Progress (ISTEP) examinations have been given by the Indiana Department of Education since 1987. Beginning in 1991, the ISTEP examinations included the Comprehensive Test of Basic Skills, Fourth Edition, making possible comparisons with student scores from other states. In both 1991 and 1992, Indiana students who took the examinations in grades 2, 3, 6, 8, and 9 performed at levels above the national averages.[13] Scores among Indiana students also increased slightly in 1992 over those in 1991 (Table 7.3). In both 1991 and 1992, however, scores fell with each increase in grade level. In 1992, Dr. H. Dean Evans, then Superintendent of Public Instruction, warned educators, parents, and students against a false sense of security. He stated: "Indiana students may be doing well compared to students in other states, but the simple truth is that students throughout the country have not learned nearly as much as they need to know."[14]

**Table 7.3 Indiana Student ISTEP Scores* (Total Battery), by Grade Level, 1991, 1992**

| Grade | 1991 | 1992 |
|---|---|---|
| 2 | 63.0 | 65.3 |
| 3 | 63.7 | 64.1 |
| 6 | 59.5 | 60.9 |
| 8 | 59.6 | 59.3 |
| 9 | 59.0 | 60.2 |

*Scores for each year are expressed in Normal Curve Equivalents (NCEs).

*Source*: Indiana Department of Education.

Concerned that test scores reflected only minimal skills necessary to achieve at the next grade level, the Indiana Department of Education developed and adopted a more rigorous strategy for assessing academic proficiency. Master teachers from around the state were convened and asked to define what students should know at various points in their academic careers. The resulting Essential Skills Standards were adopted in December 1991 and implemented during the 1991-92 school year. Held to these standards, two in five Hoosier students did not make the grade. Consistent with the decline in test scores that appeared with each rise in grade level, the percentage falling below the Essential Skills

**Table 7.4 Indiana Student Remediation Information, 1992**

| Grade | Number Tested | Qualified for Remediation | | Below Essesential Skills Standard | |
|---|---|---|---|---|---|
| | | Number | % | Number | % |
| 2 | 67,528 | 4,766 | 7.1 | 19,629 | 29.1 |
| 3 | 68,027 | 5,970 | 8.8 | 26,739 | 39.3 |
| 6 | 67,788 | 4,474 | 6.6 | 27,144 | 40.0 |
| 8 | 64,025 | 4,567 | 7.1 | 34,092 | 53.2 |
| **Total** | **267,368** | **19,777** | **7.4** | **107,604** | **40.2** |

*Source*: Indiana Department of Education, Center for School Assessment, 1992.

Standards also increased—from 29% in grade 2 to 53% in grade 8 (Table 7.4). Most of these students could have profited from remediation. Funding cuts of over $5 million, however, obliged the Department of Education to alter eligibility standards so that only about 7% of the students in grades 2, 3, 6, and 8 actually qualified for state-funded, summer-school remedial programs.

## National Assessment of Educational Progress (NAEP)

In 1969, the U.S. Congress mandated the National Assessment of Educational Progress to monitor the academic achievement of American elementary and secondary students. Periodically, examinations have been administered to samples representative of United States students as a whole. Since two of the national education goals relate to achievement in mathematics and science, achievement in these areas is of particular interest. Following two decades of national testing, the National Center for Education Statistics introduced the 1990 NAEP report, *The State of Mathematics Achievement*, with these discouraging words:

> Not only are students generally ill equipped to cope confidently with the mathematical demands of today's society, such as the graphs that permeate the media and the regulations and procedures that underlie credit cards, discounts, taxation, insurance, and benefit plans, [but] further, relatively small numbers of students persevere in the study of higher mathematics.[15]

The 1990 NAEP mathematics assessment contained a new dimension: states could participate, on a voluntary basis, in the Trial State Assessment Program for 8th-graders. Indiana was one of 38 states that elected to do so, thus making possible state-with-state and state-with-nation comparisons of young Hoosiers' mathematics achievement. National statistics were drawn from assessments of students in both public and private schools;

state-level assessments were conducted in public schools only. In terms of total score, Indiana ranked 14th among the 37 participating states and the District of Columbia (DC). Indiana was among a group of fourteen states with scores so similar that differences were not statistically significant. In eight states, proficiency was significantly higher, but in 15 states and DC, math proficiency was significantly lower.[16]

More meaningful than such overall comparisons are the percentages of 8th-graders passing each of the four "anchor levels" of the mathematics assessment (Table 7.5). These achievement levels are established on the basis of the content of the entire test. The question then arises, how well *should* 8th-graders be doing? In a second analysis, NAEP established cut-off points for three achievement levels (tests are scored on a scale from 0-500):

- *Basic*, meaning the student has partial mastery of knowledge and skills (minimum score: 255).
- *Proficient*, meaning a solid academic performance (minimum score: 295).
- *Advanced*, meaning superior performance (minimum score: 336).

State-with-national and -regional comparisons for Indiana are presented in Figure 7.1.[17]

Within the state, as was true for the nation, students from advantaged urban communities were more likely to be at or above the basic, proficient, and advanced levels than students from other types of communities. Students from disadvantaged urban communities had the lowest achievement levels. Achievement levels for Hoosier students from advantaged urban areas were similar to those of the nation. Achievement levels for Indiana students from disadvantaged urban areas, however, were below scores for students from similar areas in the nation as a whole. Students from extreme rural areas in Indiana, on the other hand, performed at well above national achievement levels.[18]

Gender differences at the basic and advanced levels were not significant. Male students were more likely than females to be at or above the proficient level, however. In Indiana, as throughout the nation, 8th-grade student performance was also strongly related to parental education. Although state-level NAEP achievement data are not available for grade 12, national data show an even stronger relationship, particularly at the advanced level, between achievement and parental education.

**Table 7.5 Overall Mathematics Proficiency of 8th Graders in Indiana, the United States and the Central States Region, 1990, NAEP Assessment**

| | | Indiana[a] | | United States | | Central States[b] | |
|---|---|---|---|---|---|---|---|
| **Average Proficiency of 8th Graders:** | | 267 | (1.1) | 261 | (1.4) | 265 | (2.6) |
| **Level** | **Description** | **Percentage of Students At or Above** | | | | | |
| 200 | Simple additive reasoning and problem solving with whole numbers | 99 | (0.4) | 97 | (0.7) | 98 | (0.9) |
| 250 | Simple multiplicative reasoning and two-step problem solving | 71 | (1.5) | 64 | (1.6) | 70 | (3.2) |
| 300 | Reasoning and problem solving involving fractions, decimals, percents, elementary geometry, and simple algebra | 14 | (1.2) | 12 | (1.2) | 12 | (2.5) |
| 350 | Reasoning and problem solving involving geometry, algebra, and beginning statistics and probability | 0 | (0.1)[c] | 0 | (0.2)[c] | 0 | (0.2)[c] |

*Note:* [a] The standard Errors of the estimated percentages and proficiencies appear in parentheses.

[b] States in Central Region include: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI. Figures are public school students only.

[c] Percentages less than 0.5 were rounded to 0. Nationally, a few 8th-graders (0.3%) achieved at or above the 350 level.

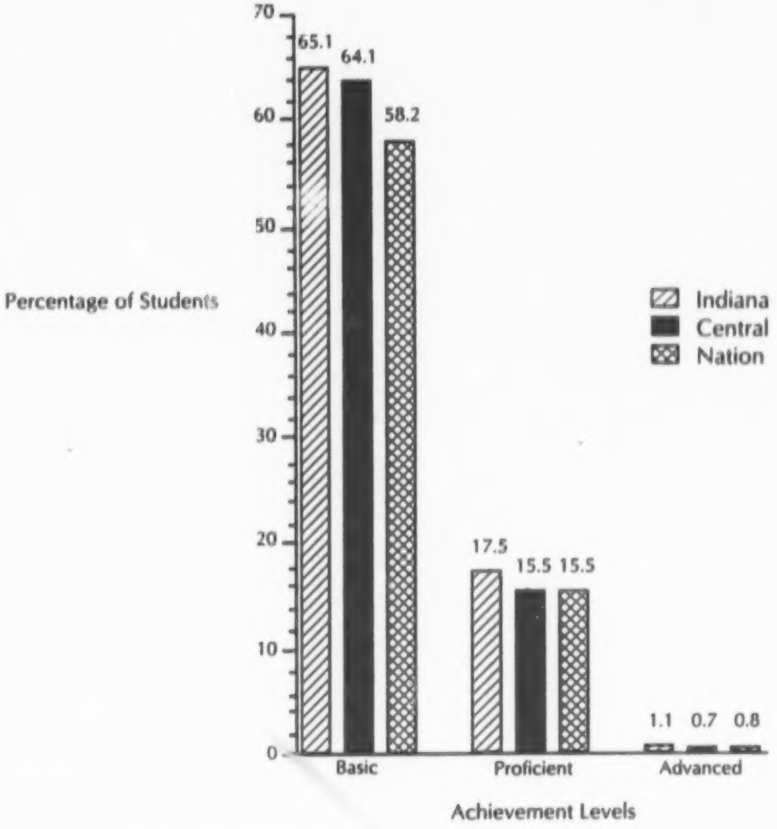
*Source:* National Center for Education Statistics.

## College entrance examinations

Two examinations, the Scholastic Aptitude Test (SAT) and the American College Test (ACT), dominate the field of college entrance testing. Both tests have verbal and mathematics components; Hoosier students are most likely to take the SAT.

Nationally, the 1991 SAT verbal scores represented an all-time low and the 1991 SAT math scores showed the first decline since 1980. Donald M. Stewart, president of the College Board which administers the exam, noted that students who also took the Board's subject-matter achievement tests averaged nearly 100 points higher on each part of the

**Figure 7.1 Percentage of Students At or Above Grade 8 Achievement Levels for Indiana, Central Region and United States**



*Source*: National Center for Education Statistics.

test than did all SAT takers. Many of these students were seeking admission to the nation's elite colleges and universities. Stewart warned, "If this kind of dichotomy continues, we could evolve into a nation divided between a small class of educational elite and an underclass of students academically ill-prepared for the demands of college or the workplace."[19] It is disturbing, therefore, to find that Indiana students continue to perform at well below the national averages, and rank near the bottom for all 50 states (Table 7.6).

**Table 7.6 SAT Scores**

| | | Verbal | Math |
|---|---|---|---|
| 1992 | Indiana | 409 | 459 |
| | U.S.* | 423 | 476 |
| 1991 | Indiana | 408 | 457 |
| | U.S. | 422 | 474 |
| 1990 | Indiana | 408 | 459 |
| 1989 | Indiana | 412 | 459 |
| 1988 | Indiana | 412 | 458 |
| 1987 | Indiana | 415 | 459 |
| 1986 | Indiana | 415 | 459 |
| | U.S. | 430 | 476 |
| 1982 | Indiana | 407 | 453 |
| | U.S. | 426 | 467 |

**Note:* 5-year and 10-year U.S. comparisons.

*Source*: College Board, August 1992.

Comparison of SAT scores among the states is discouraged by the College Board, since the proportions of eligible students taking the examination vary widely from one state to another. Generally, the higher the percentage of a state's students taking the test, the lower the state's average scores. Indiana's participation rate was 58% in 1992. Therefore it is of interest to compare Indiana's average SAT scores only with those states where half or more graduates took the test (Table 7.7). Among this group of 21 states, Indiana's average Verbal SAT score of 409 ranked 16th; Indiana's average Mathematics SAT score of 459 tied with Pennsylvania's for a rank of 16.[20]

Educational researchers have worked out methods of adjusting college entrance examination scores to take into account the different proportions of students taking them. They have also devised methods for making scores on the SAT and ACT comparable. Robert Lehnen, Co-Director of the Indiana Education Policy Center at Indiana University, has compared and summarized findings from several such studies.[21] Depending upon the adjustment methodology employed, Indiana ranks consistently in the bottom third or bottom fourth of the 50 states and the District of Columbia.

## The Armed Forces Qualifying Test (AFQT)

To gain further insights into Indiana's comparative educational standing among the states, Lehnen has made innovative use of other national databases. One of them is the Armed Forces Qualifying Test (AFQT) of the U.S. Department of Defense (DOD). Unlike SAT and ACT scores, the AFQT provides comparative information for young people who are, for the most part, not college bound.[22]

All applicants and enlistees for the United States armed forces are given the Armed Services Vocational Aptitude Battery. Within this battery is the Armed Forces Qualifying Test (AFQT), which measures reading, writing, and mathematics achievement. Recent DOD reports have included state-level performance information. The median percen-

**Table 7.7 SAT Scores for Indiana and Other States with 50% or More Graduates Taking the Examination, 1992**

| State | Graduates Taking Test (%) | Verbal Score | Math Score |
|---|---|---|---|
| New Hampshire | 76 | 440 | 483 |
| Oregon | 55 | 439 | 486 |
| Delaware | 66 | 432 | 463 |
| Washington | 50 | 432 | 484 |
| Maryland | 66 | 431 | 476 |
| Connecticut | 79 | 430 | 470 |
| Vermont | 69 | 429 | 468 |
| Massachusetts | 80 | 428 | 474 |
| Virginia | 63 | 425 | 468 |
| Maine | 66 | 422 | 460 |
| Rhode Island | 70 | 421 | 460 |
| New Jersey | 75 | 420 | 471 |
| Pennsylvania | 68 | 418 | 459 |
| New York | 75 | 416 | 466 |
| Florida | 50 | 416 | 468 |
| **Indiana** | **58** | **409** | **459** |
| District of Columbia | 73 | 405 | 437 |
| North Carolina | 57 | 405 | 450 |
| Hawaii | 56 | 401 | 477 |
| Georgia | 65 | 398 | 444 |
| South Carolina | 59 | 394 | 437 |
| **U.S. average** | **42** | **423** | **476** |

*Source*: College Board, August 1992.

tile score is an achievement test measure, while the percentage disqualified for what they call "mental" criteria is comprised of those persons excluded from the services because they do not possess the minimum academic requirements for enlistment.

In a preliminary study, Lehnen reviewed the results for 1986, when 722,378 applicants from the 50 states and the District of Columbia took the test. Nationally, the median percentile score was 60.3, and 10% of the applicants were disqualified for "mental" reasons. In 1986, there were 19,116 Indiana applicants who took the examination. Hoosiers achieved a median percentile score of 59.8, slightly below the national average, for a state rank of 26. Slightly more Hoosiers (11%) than nationally were disqualified, giving Indiana a state rank of 34.[23] A review of qualification rates for the AFQT over more than a decade (1981-1991) found Hoosiers generally in the bottom half compared with 49 states and the District of Columbia. Scores on the AFQT during this same period were always in the bottom half compared with 50 states and the District of Columbia.[24]

### Summary

The record of Indiana students on standardized test scores is mixed. On tests of basic skills administered to younger children, the state's students perform at or slightly above national norms. Hoosier students consistently score below the national norms on examinations such as those designed to summarize preparedness for higher education or military service, where more demanding skills and abstract reasoning abilities are probed. Given the growing complexity of workforce needs, the poor performance of Indiana's high-school students is a matter of increasing concern.

## Workforce Development Issues

A recent report from The Institute on Education and the Economy at Teachers College, Columbia University, echoed the conclusions of many recent reports on the current state of workforce preparation:

> How the United States organizes its education—what we teach, to whom, when, and especially how—approximately matches how the country has organized economic activity for decades. The workplace, however, is gradually changing, and our traditional way of organizing education no longer meets the needs of our students.[25]

William H. Kolberg, president of the National Alliance of Business made the connection between workforce skills and broader issues of national prosperity and income equity:

> Without a systemic policy of providing continual improvement and expansion of workforce skills, we will not keep up with our economic competitors who are doing just that, and our general standard of living will decline. There is a direct link between the economic trends that affect families and the ability of American business to compete. We all recognize the growing disparity between upper and lower income workers. A democratic society cannot tolerate such broad income disparities for long and continue to remain strong. From my analysis, those disparities are based largely on widening gaps in basic educational skills between those who go on to higher education and those who do not. When the gaps widen enough to exclude more people from economic opportunity, we will face far larger consequences of economic and social disruption.[26]

Indiana has spent several years debating and planning for the new realities involved in the development of a highly skilled workforce that will be both nationally and globally competitive. Chapter 2 discussed recent and anticipated shifts in Indiana's economic base. The 1990 report of the Commission on the Skills of the American Workforce pointed out obstacles standing in the way of producing a highly educated workforce. Two problems cited were the lack of "a clear standard of achievement" and the fact that "few students are motivated to work hard in school . . . because they see little or no relationship between how well they do in school and what kind of job they can get after school."[27] Indiana faces similar problems. As noted above, lack of interest in the curriculum was the primary reason given by Hoosier students for dropping out of school.

## Workforce development legislation

In 1992, the Indiana General Assembly enacted Workforce Development legislation to be implemented by the 1994-95 school year. No appropriations were provided for implementation, however. If the legislation is translated into practice, many changes will take place in how young Hoosiers are educated and how their skills are assessed. The following are some of the provisions of the legislation:

- A state standards task foree (comprised of representatives from business, labor, and education) will study and make recommendations to the state board of education (SBE) concerning the essential skills standards and the assessment instruments to be used under the gateway (10th grade) assessment program.

- The SBE is required to adopt for both the grade 4 and grade 8 assessment program and the gateway assessment program, the essential skills standards and the respective state tests.
- Beginning with the 1994-95 school year, the assessment program is to be implemented statewide and constitute the ISTEP program. The assessment programs consist of the state test, a local student diagnostic assessment (optional), a student portfolio, classroom performance, and teacher evaluation of essential skills.
- Essential skills remediation is [to be] determined at each grade level by the student's essential skills teacher and principal.
- For public school students, the passage of the gateway (grade 10) test is [to be] a requirement for graduation from high school. Students may be assessed by alternative means as approved by the DOE.
- Upon passage of the gateway test or the alternative test, a public school student is required to develop a career plan (in which the student chooses the technology preparation curriculum ["Tech Prep"] or the college preparation curriculum) and may elect to undergo certificate of achievement assessments. *The technology preparation and the college preparation curricula must both provide a student with at least the necessary credits and courses to gain admittance to a state college* [emphasis added]. A student's career plan may be modified along the way, and a student is not prohibited from taking courses from the curriculum not chosen.
- Certificates of achievement will be available at both secondary (academic and technical) and post-secondary (technical) levels. State educational institutions are required to jointly identify at least 30 semester credit hours of comparable general education courses that are eligible to be earned by students to fulfill graduation requirement at each state educational institution. *Credits earned in any of these identified courses shall be transferable among all state educational institutions* [emphasis added].[28]

The new legislation has already sparked controversy among the key players charged with further planning and implementing this workforce development plan. Many Hoosier educators, parents, and students themselves—as is true for their counterparts elsewhere—do not perceive a need for radical, systemic changes in the ways that young people are educated. Others believe that such changes must take place if young people are to be trained as life-long learners with the skills needed to keep up with the pace of change within their occupational areas. Even those who believe change is necessary have not reached consensus on just what this complex of necessary skills entails.

## The Secretary's Commission on Achieving Necessary Skills (SCANS).

One approach to education for employability was developed in the 1992 report of The Secretary's Commission on Achieving Necessary Skills. The Commission, appointed by the U.S. Secretary of Labor, based the report on extensive interviews with employers from all sectors of the American economy.,They concluded the following:

> A high performance workplace demands workers who have a solid foundation in the traditional basic and academic skills, in the thinking skills necessary to put knowledge to work, and in the personal characteristics that make a worker confident, trustworthy, and responsible. We called this the "foundation" of workplace know-how.[29]

The know-how identified by the Commission consists of five workplace competencies to be built upon a three-part foundation of skills and personal qualities needed for a solid job performance (see Boxes A and B). One aspect of current discussion in Indiana is focused on bringing the SCANS know-how into the classroom and using it as the basis for the gateway examination that students will be given in grade 10. Such an approach would be highly innovative and watched with much interest by educators throughout the nation. The SCANS approach, however, is not without critics.

While the SCANS framework may prove effective in identifying essential skills and competencies and describing what students should know and be able to do, its applicability for organizing curriculum and instituting instructional strategies remains to be demonstrated. The SCANS documents are addressed primarily to the obligations of schools, teachers, and students. The role of parents is relatively neglected, in spite of numerous studies that have identified parents as the most important adult influence on career choices.[30] Furthermore, SCANS does not spell out the corresponding adjustments that must take place in industrial and business settings if employees are to be empowered to function as a "world class" workforce. Finally, perhaps the most critical issue of all was cited by Mary Hatwood Futrell, Senior Fellow at the Center for the Study of Education and National Development at George Washington University. She argues that while education can function as the engine driving the economy, a very different culture and society emerge when the economy is the engine that drives education.

## Box A

**FIVE COMPETENCIES**

**Resources:** Identifies, organizes, plans, and allocates resources

A. *Time* - selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules

B. *Money* - uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives

C. *Material and Facilities* - acquires, stores, allocates, and uses materials or space effciently

D. *Human Resources* - assesses skills and distributes work accordingly, evaluates performance and provides feedback

**Interpersonal:** Works with others

A. *Participates as Member of a Team* - contributes to group effort

B. *Teaches Others New Skills*

C. *Serves Clients/Customers* - works to satisfy customers' expectations

D. *Exercises Leadership* - communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies

E. *Negotiates* - works toward agreements involving exchange of resources, resolves divergent interests

F. *Works with Diversity* - works well with men and women from diverse backgrounds

**Information**: Acquires and uses information

A. *Acquires and Evaluates Information*

B. *Organizes and Maintains Information*

C. *Interprets and Communicates Information*

D. *Uses Computers to Process Information*

**Systems:** Understands complex inter-relationships

A. *Understands Systems* - knows how social, organizational, and technical systems work and operates effectively with them

B. *Monitors and Corrects Performance* - distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions

C. *Improves or Designs Systems* - suggests modifications to existing systems and develops new or alternative systems to improve performance

**Technology:** Works with a variety of technologies

A. *Selects Technology* - chooses procedures, tools or equipment including computers and related technologies

B. *Applies Technology to Task* - understands overall intent and proper procedures for setup and operation of equipment

C. *Maintains and Troubleshoots Equipment* - Prevents, identifies, or solves problems with equipment, including computers and other technologies

## Box B

### A THREE-PART FOUNDATION

**Basic Skills:** Reads, writes, performs arithmetic and mathematical operations, listens and speaks

A. *Reading* - locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. *Writing* - communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts

C. *Arithmetic/Mathematics* - performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. *Listening* - receives, attends to, interprets, and responds to verbal messages and other cues

E. *Speaking* - organizes ideas and communicates orally

**Thinking Skills:** Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. *Creative Thinking* - generates new ideas

B. *Decision Making* - specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. *Problem Solving* - recognizes problems and devises and implements plan of action

D. *Seeing Things in the Mind's Eye* - organizes, and processes symbols, pictures, graphs, objects, and other information

E. *Knowing How to Learn* - uses efficient learning techniques to acquire and apply new knowledge and skills

F. *Reasoning* - discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

**Personal Qualities:** Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. *Responsibility* - exerts a high level of effort and perseveres towards goal attainment

B. *Self-Esteem* - believes in own self-worth and maintains a positive view of self

C. Sociability - demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. *Self-Management* - assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. *Integrity/Honesty* - chooses ethical courses of action

*Source:* U.S. Department of Labor.

## Notes

1. The Indiana Department of Education defines a dropout as "any student in grades 7-12 who leaves school before graduation without transferring to another school/institution." **The following are considered to be dropouts:** students who leave school and enter an educational program not leading to a high-school diploma; Amish students who leave school before high-school graduation; students who drop out in the summer or between semesters; students who are incarcerated in adult institutions; expelled students who fail to return to school when eligible; students who leave school, for whom the school does not receive a transcript request or whose whereabouts are unknown; and students transferring to adult programs, technical schools or GED programs. **The following are not counted as dropouts:** students who die; students who suffer from prolonged illnesses that keep them away from school; students who transfer to another institution with an educational program leading to a high-school diploma; and students who are suspended for a temporary period. Center for School Assessment. Indiana Department of Education, *Educational Data and Information Technology (E.D.I.T.) Conference Handbook* (Indianapolis: Indiana Department of Education, January 1992).

2. Indiana Department of Education, 1992.

3. E. J. McCaul, G. A. Donaldson, Jr., T. Coladarci, and W. E. Davis, "Consequences of Dropping Out of School: Findings From High School and Beyond," *The Journal of Educational Research* 85, 4 (March/April 1992), p. 200.

4. Indiana Department of Education, 1992.

5. Indiana Department of Education, 1992.

6. U.S. Bureau of the Census, Press Release, "Education has more positive effect than other factors on income distribution, Census Bureau researchers find" (Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, October 30, 1992), p. 1.

7. P. Kaufman. "An Analysis of Eighth Grade At-Risk Students in the National Education Survey of 1988." Paper presented to the annual meeting of the American Statistical Association, Atlanta, GA, August 1991. Kaufman used data from the U.S. Department of Education, National Center for Education Statistics, "National Education Longitudinal Study of 1988: Base Year and First Follow-up Survey." Socioeconomic status was a composite variable based on the parent questionnaire in the NELS:88 study. Variables included were father's education level, mother's education level, father's occupation, mother's occupation, and family income.

8. Indiana Department of Education, IDEANET, 1993. The Pearson correlation coefficient (r) for graduation rate and single-parent families was -0.5170 (26.7% of variance in graduation rate explained); between

graduation rate and socioeconomic status, r = 0.5140 (26.4% of variance explained); and between percent families below poverty, r = -0.3580 (12.8% of variance explained). Between graduation rate and percent minority students, r = -0.2230 (5.0% of variance explained).

9. Exit interview data provided by the Indiana Department of Education; J. B. Erickson, *Indiana Youth Poll: Youths' Views of High School Life* (Indianapolis: Indiana Youth Institute, 1991), Chapter 6.

10. Office of the Governor, *Meeting The Challenge; Education Progress in Indiana* (Indianapolis: Office of the Governor, November 1992), pp. 25-6.

11. R. Rothman. "20-Nation Study Shows U.S. Lags In Math, Science." *Education Week*, 11, 21 (February 12, 1992), 11, 13; R. Rothman. "Debate Rages Over Validity of International Studies of Students," *Education Week* 11, 13 (February 12, 1992), 12. Nations that participated in the study included: *Brazil; Canada; *China; England; *France; Hungary; Ireland: Israel; Italy; *Jordan; Korea; *Mozambique; Portugal; Scotland; Slovenia; Former Soviet Union; Spain; *Switzerland; Taiwan, and the U.S.A. (*indicates six nations that participated in the 13-year-old assessment only).

12. National Commission on Excellence in Education, "An Open Letter to the American People; A Nation at Risk: The Imperative for Educational Reform" *Education Week* 2, 31 (April 27, 1983), pp. 12-16.

13. S. Hannon, ISTEP Program Manager, Memorandum to all superintendents, June 9, 1992; Indiana Department of Education, Press Release, "Evans Releases 1992 ISTEP Scores," June 12, 1992. Test scores become comparable when transformed into "Normal Curve Equivalents" (NCEs). NCEs are arranged on a scale of 1 to 99, with a mean of 50 and a standard deviation of approximately 21.

14. Evans releases 1992 ISTEP Scores.

15. National Center for Education Statistics, *The State of Mathematics Achievement: NAEP's 1990 Assessment of the Nation and the Trial Assessment of the States; Executive Summary*. Report No. 21-ST-03 (Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education, 1991), p. 1. The study was performed by the Educational Testing Service for the National Center for Education Statistics.

16. National Center for Education Statistics, *The State of Mathematics Achievement*, p. 16.

17. National Center for Education Statistics, *The State of Mathematics Achievement*, pp. 5, 134.

18. Results were provided for four community types. *Advantaged urban* students resided in metropolitan statistical areas and attended schools where a high proportion of the students' parents held professional or managerial positions. *Disadvantaged urban* students resided in metropolitan statistical areas and attended schools where a high proportion of the students' parents were on welfare or were not regularly employed. *Extreme*

*rural* students did not reside in metropolitan statistical areas; they attended schools in areas with a population below 10,000 where many of the students' parents were farmers or farm workers. The "*Other*" category was comprised of students attending schools in areas other than those defined as advantaged urban, disadvantaged urban, or extreme rural. National Assessment Governing Board, *The LEVELS of Mathematics Achievement*, Vol. 1, National and State Summaries (Washington, DC: National Assessment Governing Board, 1991), pp. 323-4.

19. College Board, Press release, "SAT Verbal and Math Averages Each Fall Two Points, But Many Students in Class of 1991 Continue to Do Well," August 27, 1991; The College Board, "College-Bound Seniors of 1991: Information on Students Who Took the SAT and Achievement Tests of the College Board" (New York: The College Board, 1991).

20. College Board, Press release, August 27, 1992. Accompanied Indiana Department of Education, Press Release, August 26, 1992.

21. R. G. Lehnen, "Constructing State Education Performance Indicators from ACT and SAT Scores," *Policy Studies Journal* 20, 1 (1992) pp. 22-40.

22. R. G. Lehnen. "The 'Golden Age' of Indiana Education: Did It Ever Exist?" (Indianapolis: Indiana Education Policy Center, School of Public & Environmental Affairs, Indiana University, October 1992). Lehnen transformed scores and rates into percentiles to establish the relative position of Indiana's students taking tests.

23. R. G. Lehnen, "Creating State Education Indicators from Historical Data." Paper presented at the annual meeting of the American Statistical Association, Atlanta, Georgia, August 1991.

24. Lehnen, "The 'Golden Age' of Indiana Education," n.p.

25. S.E. Berryman and T. R. Bailey, *The Double Helix of Education & the Economy. Executive Summary* (New York: The Institute on Education and the Economy, Teachers College, Columbia University, 1992), p. 1.

26. W. H. Kolberg, "Building a Workforce Investment System," *Youth Policy* 14, 3 (March/April 1992) pp. 14-16.

27. I. Magaziner and H. R. Clinton, "Will America Choose High Skills or Low Wages?" *Educational Leadership* 49, 6 (March 1992), pp. 10-14.

28. Overview of Senate Enrolled Act 419; Workforce Development Legislation (Indianapolis: Indiana Department of Workforce Development, 1992).

29. The Secretary's Commission on Achieving Necessary Skills, *Learning a Living: A Blueprint for High Performance* (Washington, DC: U.S. Department of Labor, April 1992), pp. 5-6.

30. Research findings are summarized in L. B. Otto, *How to Help Your Child Choose a Career* (New York: M. Evans and Company, Inc., 1984), pp. 63-86.

Chapter 8

# Educating Children With Special Needs

School does not start out as an even playing field for many students. By virtue of physical, cognitive, or social disabilities or limitations, many youngsters need special help if they are to enter school ready to learn and/or remain in school until they reach their full potential. Indiana offers many programs for students with special needs. Space limitations make it impossible to discuss all of them, but several are outlined below.

## Head Start

When the nation declared "war on poverty" in 1964, Title II of the Economic Opportunity Act simply provided that there would be special programs for the poor and that they would be located outside the usual framework of the public educational system. In an amazingly swift sequence, the mandate moved through a planning phase, begun in November 1964, into nationwide operation by the summer of 1965. Called "Head Start," this program of preschool education was a gamble in intervention. The mission extended well beyond education. The Head Start program that emerged was six-fold: "(1) an educational program; (2) health services, to provide medical diagnosis and treatment; (3) social services, aid to the child's family; (4) psychological services; (5) nutrition; [and] (6) a parent participation program."[1]

There is no single Head Start program. In Indiana, the most common models in current use are center-based programs that run for four days per week and home-based programs. All but six of Indiana's 92 counties have some type of Head Start program. Indiana Head Start reached 9,543 children in 1991—about 20% of those eligible for services. The state received $27,371,013 for operating the program with expenditures averaging $2,868 per child, well below the national average expenditure of $3,226 per program participant.

***Head Start programs in Indiana face continuing challenges. One problem is finding well-trained staff to work for the low wages available.***

Nationally, the Head Start program has both supporters and critics. Evaluation research has shown that children who have participated in well-designed programs conducted by appropriately trained staff do make educational gains. However, many Head Start programs cannot meet these conditions. Even when they do, without additional intervention beyond preschool, many of the gains fade and even disappear in a few years. For a good many children, limited resources have resulted in single-year programs that may be inadequately designed or spread too thin for maximum benefits to accrue. Consequently, some of the program's supporters question whether Head Start services should be directed only to children with the greatest needs. Edward Zigler, one of the designers of the Head Start program, was quoted recently as saying, "I have been arguing for years that you have to follow up a year of Head Start. I'd rather serve fewer kids and serve them well than a lot of children badly."[2]

Like their counterparts nationally, Head Start programs in Indiana face continuing challenges. One problem is finding well-trained staff to work for the low wages available. Another, particularly in rural areas, is finding appropriate, accessible space that can meet the state's licensing requirements. Indiana Head Start also continues to have difficulty in finding affordable medical and dental care for participating youngsters and their families. Only 2% of the families of Hoosier children in Head Start, for example, have taken advantage of the Early Periodic Screening and Diagnostic Testing (EPSDT) for which they are eligible.[3] As Indiana counties move forward with Step Ahead, the comprehensive network of children's and family services now in the planning stages, Head Start will be among the agencies collaborating to form partnerships for the development of policy, service delivery, staff training, and program funding.[4]

## Migrant Head Start Program

Each summer, about 2,000 migratory agricultural workers and family members come to Indiana. The Texas Migrant Council provides comprehensive services to migrant families at their home base in Texas and at various sites when they migrate northward during the growing season. The Council provides Head Start programs in 11 centers in Indiana. In 1991, programs provided early-childhood development services to 558 children in 13 Indiana counties. Participants ranged from 6 weeks through 5 years of age.

Each Head Start Center is staffed by individuals who are themselves migrants or former migrants. A core staff of about 12 moves north with each of the mobile centers. Upon arrival in Indiana, operations are set up primarily in church facilities. As is true for Head Start generally, the migrant programs provide educational, health, nutritional, and social services, as well as transportation and parent involvement. All staff members are bilingual and bicultural and have received training from the Texas Migrant Council's professional staff. Parents are encouraged to participate in the classrooms as paid employees, volunteers, or observers. Their recommendations about the nature and operations of the program are invited. Against considerable odds, this special Head Start program provides a variety of essential services, as well as some continuity in the education of migrant children whose lives are disrupted frequently during several months each year.[5]

***All staff in Head Start programs for migrant families are bilingual and bicultural and have received training from the Texas Migrant Council's professional staff.***

## Chapter 1

For more than a quarter of a century, Chapter 1 (originally Title 1) of the Elementary and Secondary Education Act (ESEA) has provided supplementary instruction in reading, writing, and mathematics for educationally disadvantaged pupils in preschool through grade 12. In spite of a budget that has grown yearly (about $7 billion in 1992), only about half of the nation's eligible students actually received Chapter 1 services during the 1990-91 school year. The proportion of eligible Hoosiers receiving services was even lower.

While 253,438 public school students in kindergarten through grade 12 were eligible for Chapter 1 help in 1990-91, only 85,598 (34%) received services. When pre-schoolers, private school students, and neglected or delinquent students were included, the unduplicated count of students served rose to 94,258. Indiana follows national guidelines and concentrates services in the lower grades, where research shows Chapter 1 support has greatest impact. Funds can be used to provide the follow-up interventions recommended for Head Start participants.

Chapter 1 funds are distributed to local education agencies (LEAs) using a complex formula based on the proportion of low-income children attending. In the 1990-91 school year, 1,126 schools in Indiana operated Chapter 1 projects. The federal government mandates examinations that produce pre- and post-test scores for participants in the program. Scores are converted to normal curve equivalents (NCEs) and compared to reveal change over time. During the 1990-91 school year, achievement test data showed gains for program participants (Table 8.1). Gains were greatest for Chapter 1 participants in grades 2 and 3.[6] Comparable test data were not available for children eligible for services who did not receive them or for children ineligible for Chapter 1 services. Thus, it is difficult to draw conclusions about how much of the demonstrated test-score gain was attributable to Chapter 1 participation. The Elementary and Secondary Education Act comes up for congressional reauthorization in 1993; some changes in the Chapter 1 program and evaluation procedures are anticipated.

**Table 8.1 Statewide Average Weighted Achievement Test Score Gains Expressed in Normal Curve Equivalents (NCEs) for Indiana Students Receiving Chapter 1 Services, School Years 1990-1991 and 1989-90**

| Achievement Test Area | Weighted NCE Gain, 1990-1991 | Weighted NCE Gain, 1989-90 |
|---|---|---|
| Reading (Basic Skills) | 3.3 | 3.3 |
| Reading Comprehension (Advanced Skills) | 4.0 | 3.7 |
| Total Language Arts (Basic Skills) | 2.8 | 4.9 |
| Total Math (Basic Skills) | 4.7 | 5.4 |
| Math Concepts and Applications (Advanced Skills) | 4.2 | 4.5 |

*Source*: Indiana Department of Education.

## Special Education Programs

Indiana was one of the earliest states to pass mandatory special education legislation. The law, passed by the Indiana legislature in 1969, required public schools to serve all children with disabilities beginning in the fall of 1973. By 1977, federal legislation was passed requiring all states to serve students with disabilities at no cost to parents.[7]

The cornerstone of special education programs (services) is the individualized education program (IEP). The IEP, which includes school placement recommendations, is developed by a group of individuals, including parents, all of whom have knowledge of the child's needs.

Currently, a major placement recommendation involves the concept of "inclusion" for many students. *Inclusion* is the practice whereby students attend their neighborhood schools and are served in age-appropriate, general education settings. "Mainstreaming," an earlier concept of service delivery, assumed that students would be placed in special education classes and enrolled in general education classes and activities whenever possible. Legislative action of the 1992 Indiana General Assembly provided funding for ten Inclusion Pilot Sites, although scores of schools are independently pursuing this approach.

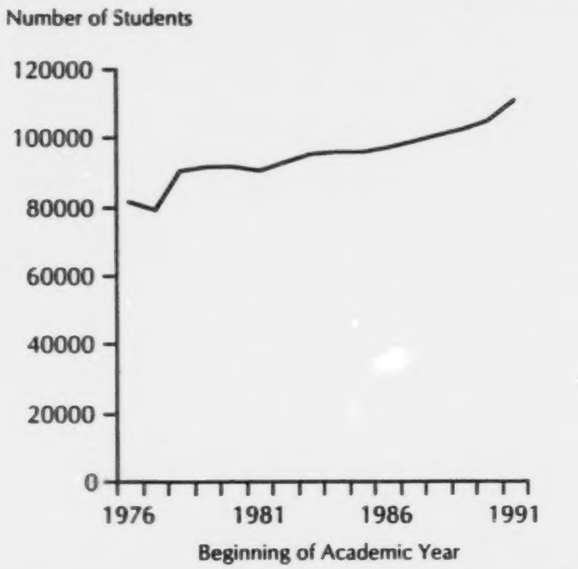
Children from age three through 21 are eligible for services funded by the Individuals with Disabilities Education Act (IDEA). During the 1990-1991 school year, nearly 7% of Indiana's resident population in that age group received such services. Comparable special education data are reported by all states; Indiana's service level is right at the national average, 7%.[8]

***While Indiana's school enrollment has declined, the number of children receiving special education services has increased.***

Another way of looking at the growth of special education programs is to compare the numbers of children receiving services with changes in overall school enrollments. While Indiana's school enrollment has declined nearly 19% since the 1976-77 school year, the number of children receiving special education services has increased. In 1976-77, 7% of all Indiana public school students received services for disabling conditions. The proportion had risen to 9% by 1981-82, and to almost 12% by 1991-92 (Figure 8.1).[9] The Department of Education points out, however, that the earlier figures from the mid-1970s reflected only the numbers of students receiving services at that time, not the numbers eligible. Since that time, participation has expanded, and current figures are predicated on the assumption that *all* eligible students are actually receiving services.[10]

Not only have the numbers of students receiving special education increased, but there have been shifts in the proportions receiving certain types of services (Table 8.2). The proportions of special education students receiving services for mental handicaps and for speech impairments have declined. The proportion of special education students receiving services for learning disabilities, however, rose markedly. These shifts raise questions that cannot be answered with information currently available. For example, does Indiana follow national patterns that show dispropor-

**Figure 8.1 Special Education Enrollment, Indiana, 1976 - 1991**



*Source*: Indiana Department of Education, Division of Special Education.

tionate numbers of African-American students in special education classes?[11] Is the same range of services available in urban areas also available and accessible to rural pupils? Do transportation issues make it necessary for special education students to change schools more frequently than their peers? Educators report concern over the steady growth in numbers of youngsters with serious emotional problems. Are services keeping up with the demand?

Hank Binder of the Indiana Department of Education, Division of Special Education, studied students ages 14 and older who exited special education during the 1989-90 school year. Two-thirds left the public educational system with high school diplomas (59%) or certificates (7%). About one-fourth dropped out or reached the maximum age.[12] Although this large dropout rate is disturbing, special education students in Indiana completed school at a rate nearly equal to the *national average* high-school graduation rate (68.7% in 1990).[13]

School-leaving patterns varied widely for young people with different disabling conditions. Graduation was highest among students with physical disabilities (93%) and those with hearing impairments (90%). Only 41% of the emotionally disturbed young people received diplomas or certificates, again raising the question of whether the availability of mental health services for young people is sufficient for the demand.

## Programs for At-Risk Students

The Indiana legislature established the Educational Opportunity Program for At-Risk Students in 1987. Administered by the Department of Education, the fund provided nearly $20 million dollars to assist local school corporations in implementing new or expanded programs to benefit students determined to be at risk.[14] Students defined as "at risk" had a

**Table 8.2 Indiana Students Receiving Special Education Services 1976-77 to 1991-92 (Unduplicated Count)**

| | School Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1976-77 | | 1981-82 | | 1986-87 | | 1991-92 | |
| Execptionality Area | No. | % | No. | % | No. | % | No. | % |
| Mentally handicapped | 23,725 | 29.1 | 21,435 | 23.6 | 17,777 | 18.2 | 17,106 | 15.4 |
| Hearing impaired | 936 | 1.1 | 692 | 0.8 | 680 | 0.7 | 888 | 0.8 |
| Speech impaired | 48,759 | 59.7 | 40,287 | 44.4 | 39,271 | 40.3 | 39,935 | 36.0 |
| Visually handicapped | 375 | 0.5 | 265 | 0.3 | 332 | 0.3 | 358 | 0.3 |
| Seriously emotionally handicapped | 1,077 | 1.3 | 2,132 | 2.3 | 3,588 | 3.7 | 5,771 | 5.2 |
| Orthopedically impaired | 560 | 0.7 | 423 | 0.5 | 423 | 0.4 | 808 | 0.7 |
| Other health impaired | – | – | 21 | 0.0 | 59 | 0.1 | 225 | 0.2 |
| Specific learning disabled | 5,422 | 6.6 | 24,981 | 27.5 | 34,806 | 35.7 | 45,248 | 40.8 |
| Deaf/blind | – | – | 12 | 0.0 | 39 | 0.0 | 30 | 0.0 |
| Multiply handicapped | 785 | 1.0 | 487 | 0.5 | 450 | 0.5 | 574 | 0.5 |
| **Totals** | **81,639** | **100.0** | **90,735** | **99.9** | **97,425** | **99.9** | **110,943** | **99.9** |
| As % of total school enrollment | 6.94% | | 8.85% | | 10.11% | | 11.62% | |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Department of Education, Division of Special Education.

common characteristic: "They are experiencing or have the potential for academic failure."[15] Local programs were to address such "indicators of risk as low academic achievement, low self-esteem, under-developed language skills, discipline problems, delinquent and/or disruptive behavior, poor attitude toward school and teachers, and poor school attendance."[16]

During the 1991-92 school year, 725 new and continuing programs in Indiana schools were operating on At-Risk monies totalling $21,459,556. Overall, At-Risk programs served 211,697 students at a per pupil cost of a little more than $300. State guidelines have provided schools with a fairly broad set of local program options. Most frequently, funds have been used to support expanded school counseling services, followed by tutoring programs, and home school advisors who serve as liaisons between families and school personnel (Table 8.3).

**Table 8.3 Indiana At-Risk Program Information, 1991 - 1992**

| Type of Program | Number of Programs | Cost per Student ($) | Students Served |
|---|---|---|---|
| Preschool programs | 15 | 508.18 | 794 |
| Full-day kindergarten | 6 | 1,155.81 | 69 |
| Parental and community involvement | 25 | 67.08 | 8,326 |
| Tutoring | 101 | 177.43 | 14,707 |
| Remediation | 63 | 283.37 | 11,811 |
| Transition | 39 | 774.03 | 4,472 |
| Expanded use of school counseling | 165 | 266.00 | 47,417 |
| Individualized instruction | 33 | 237.97 | 3,983 |
| Alternative model | 61 | 665.05 | 10,363 |
| After school enrichment | 15 | 136.16 | 2,689 |
| Alcohol and drug abuse program | 10 | 33.66 | 5,386 |
| Home school advisor | 79 | 230.22 | 36,709 |
| Teen pregnancy program | 5 | 189.16 | 1,220 |
| Vocational emphasis | 8 | 494.90 | 442 |
| Student health | 4 | 34.09 | 1,205 |
| Mentoring | 26 | 263.32 | 51,690 |
| Other | 26 | 58.83 | 10,414 |
| **Total** | **725** | **303.55** | **211,697** |

*Source:* Indiana Department of Education, Office of At-Risk Programs.

The costs per pupil for these programs vary widely, from $1,156 for full day kindergartens to $34 for alcohol and drug abuse and student health programs.[17] Assessing the effectiveness of programs aimed at prevention is difficult and costly. Resources for program evaluation have been limited. Available evaluation data do not show whether the overall objectives of the "At Risk" program are better met by one approach or another, or several in combination.

## Education for Homeless Children and Youth

Homelessness as a national problem is not going away. Estimates of the numbers of homeless families vary widely. The National Association of State coordinators for the Education of Homeless Children and Youth is a group of 55 state and territorial coordinators responsible for implementing Subtitle VII-B of the federal Stewart B. McKinney Homeless Assistance Act. These coordinators estimated that more than 317,000 school-age children experienced homelessness in 1991. Of these, 17% did not attend school. 1990 amendments to the McKinney Act expanded states' responsibilities to provide educational services to homeless children and youth. The amendments also provide educational support according to the number of school-age children identified as homeless in 1991. Indiana received $99,895 in grants in 1991 and increased funding in 1992.[18]

Indiana attempted to count the state's homeless population in 1990, estimating between 10,000 and 30,000 persons of all ages. On any given night in 1990, more than 2,000 people were actively seeking shelter. Of this number 31% were less than 18 years of age.[19]

Homelessness poses many barriers to healthy development for young people and many challenges to the educational systems that seek to serve their needs. Many homeless children have experienced developmental delays and reach school age without the skills needed for a successful beginning to formal education. If homeless children enroll at all, they may not remain in one school long enough to receive the assessment and remediation services that might help them to catch up.

***On any given night in 1990, more than 2,000 people were actively seeking shelter. Of this number 31% were less than 18 years of age.***

In 1990, the Indiana legislature amended regulations covering school enrollment to enable youngsters to remain in the school attended at the time that family upheavals occurred. H. Dean Evans, then Commissioner of Education, advised school principals that any student whose family moved *must* be permitted to remain enrolled until the end of the semester. With school corporation approval, the student could remain in the same school until the end of the school year. The Department of Education encouraged school corporations to permit the latter option, hoping that remaining in the same school would provide a child with some stability.[20]

## Notes

1. S. H. White, "The National Impact Study of Head Start." In J. Hellmuth (Ed.), *Disadvantaged Child, Volume 3. Compensatory Education: A National Debate* (New York: Brunner/Mazel Publishers, 1970), pp. 163-184.

2. S. Chira, "New Head Start Studies Raise Question on Help: Should Fewer Get More?" *New York Times* (March 3, 1992), p. B-9.

3. Indiana Family and Social Services Administration, 1992.

4. Indiana Family and Social Services Administration, 1992.

5. M. L. deL. Siantz, Texas Migrant Council Head Start Project Narrative, 1992.

6. Indiana Department of Education, Summary of Evaluation Data Reported to U.S. Department of Education for School Year 1990-91.

7. The 1977 law, P.L. 94-142, was revised in 1990 as P.L. 101-476, also known as IDEA (Individuals with Disabilities Education Act).

8. U.S. Department of Education, *To Assure the Free Appropriate Public Education of All Children with Disabilities*. 14th Annual Report to Congress on the Implementation of The Individuals with Disabilities Education Act (Washington, DC: U.S. Department of Education, 1992), p. A-44.

9. Center for Community Relations and Special Populations, Division of Special Education, *1991-1992 Special Education Statistical Report* (Indianapolis: Indiana Department of Education, April 1992), pp. 28-9. Persons may receive special education services in the public schools from ages three through 21.

10. We are indebted to Paul Ash of the Indiana Department of Education for clarification of special education issues in Indiana.

11. National data supplied by the Office of Civil Rights, U.S. Department of Education; state-level data will be available late in 1993.

12. Indiana Department of Education, Division of Special Education, 1992.

13. The Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1993* (Washington, DC: Center for the Study of Social Policy, 1993), p. 19.

14. HEA 1360, Educational Opportunity Program for At-Risk Students (Indianapolis: Indiana Department of Education, n.d. [ca 1988]).

15. Indiana Department of Education, "Identification of At-Risk Students" (Indianapolis: author, n.d. [ca. 1990]).

16. Indiana Department of Education, "Guidelines for Developing an Educational Program for At-Risk Students" (Indianapolis: Indiana Department of Education, n.d. [ca. 1988]).

17. At Risk Program Information, School Year 1991-92, Office of At Risk Programs, Indiana Department of Education.

18. Legislation and Policy Statement Committee, *In the Shadow of Opportunity: Removing Barriers and Creating Success for America's Homeless Children and Youth* (Baltimore, MD: National Association of State Coordinators for the Education of Homeless Children and Youth, April 1992) n.p.

19. Public Health Research Division, Indiana State Board of Health, 1990.

20. H. D. Evans, conversation, April 1990.

## Building a Healthy Body

Indiana's youth will be born at full term and normal birth weight to healthy mothers. They will receive a well-balanced diet in adequate supply to grow strong bodies to acceptable height for their age. They will be provided a balance of physical activity and rest in a safe and caring environment. They and their families will have access to good medical care and educational opportunities that will teach them how to abstain from health-endangering activities and how to engage in health-enhancing activities.

Indiana Youth Institute
from *10 Blueprints for Healthy Development*

*Infant mortality rates finally began to edge downward in 1990. Many social factors–such as mother's age and health, rising poverty, and use of tobacco, alcohol and other drugs during pregnancy–continue to challenge efforts to reduce low birth weight and infant mortality rates in Indiana.*

BEST COPY AVAILABLE

# Highlights

Indiana is struggling to reduce the number of babies born weighing less than 2,500 grams. Low birth weight is the largest factor contributing to Indiana's high infant mortality rate.

The Special Supplemental Food Program for Women, Infants, and Children (WIC) provides nutritional benefits for low-income families. Nearly half of all babies born in Indiana are eligible for WIC participation.

HealthWatch provides Early and Periodic Screening, Diagnosis and Treatment (EPSDT) services for low-income families. In 1991, only one in ten eligible Hoosier children and adolescents received screening services through HealthWatch.

Childhood lead poisoning remains a problem in Indiana. The state has increased efforts to screen all children younger than age six, using newer and more stringent standards that are expected to more than double the number of children requiring follow up services.

# Health and Well-Being Introduction

This section explores how well Indiana is doing in creating sound foundations for lifetime health and well-being needed by the state's youngest citizens. Chapter 9 examines some of the state's most stubborn health problems: low birth weight (under 2,500 grams) and infant mortality rates. A recent comparison with the other 49 states and the District of Columbia found Indiana ranked 22nd in the percent of babies born at low birth weight, and 32nd in infant mortality rate.[1] Health professionals in Indiana are well aware of the problems of very young Hoosiers and have instituted many prevention programs in the fields of maternal and child health. Participation levels in several of these programs will be discussed in Chapter 9.

Even children who get a good start in life face health challenges throughout childhood and adolescence. Chapter 10 addresses three of these challenges: infectious diseases, exposure to sources of lead in the environment, and access to health care.

At several points, references are made to national health goals drawn from the report of the Centers for Disease Control (CDC) of the U.S. Public Health Service, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*.[2] This extensive report includes more than 300 objectives within 21 different areas of health promotion and disease prevention. CDC identified a smaller set of indicators that could be used to assess the health status of any state or county in the nation. Indiana has accepted the challenge of meeting the national health goals. A summary of basic indicators of the state's progress is contained in *Healthy Hoosiers 2000*, a recent publication of the Indiana State Department of Health.[3]

## Data Sources

This report's primary source of information about the well-being of young Hoosiers is the Indiana State Department of Health. The Health Department also provided statistics related to participation in health programs for mothers and children, immunization levels, incidence of tuberculosis, and childhood lead poisoning. Information about Medicaid participation came from the Indiana Family and Social Services Administration.

## Challenges:

- Using medical rather than billing records to track use of preventive health-screening services.
- Evaluating the short- and long-term costs and benefits of preventive health procedures.
- Gaining better understanding of the barriers to seeking out and using the prevention and treatment services that are available.
- Finding ways to link the health database with the information bases of other welfare and mental-health service providers, educational systems, and corrections.

## Notes

1. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1993* (Washington, DC: Center for the Study of Social Policy, 1993), p. 63.

2. Centers for Disease Control, U.S. Public Health Service, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, DHHS Publication No (PHS) 91-50212 (Washington, DC: U.S. Government Printing Office, 1990).

3. Public Health Policy Commission, Indiana State Department of Health, *Healthy Hoosiers 2000: Health Promotion and Disease Prevention Objectives* (Indianapolis: Indiana State Department of Health, Fall 1992).

Chapter 9

# A Healthy Start in Life

## Prenatal Care

A healthy start in life begins with good prenatal care, begun early in the first trimester of pregnancy and carried through until birth. Indiana has joined the nation in setting as a goal for the year 2000 that 90% of all pregnant women will receive prenatal care in the first trimester. Indiana has made marked progress toward this goal since 1984, when only 65% received prenatal care in the first trimester. By 1990, more than three out of four women (77%) received such care (Table 9.1). Although Indiana still has a long way to go, continued progress at the present rate will put the year 2000 goal of 90% within reach (Table 9.2).

**Table 9.1 Numbers and Percentage of Expectant Mothers Receiving Prenatal Care, by Trimester, 1990**

| When Care Began | Number | % |
|---|---|---|
| No care | 1,028 | 1.2 |
| 3rd trimester | 2,705 | 3.1 |
| 2nd trimester | 14,050 | 16.3 |
| 1st trimester | 66,201 | 77.0 |
| Unknown | 2,002 | 2.3 |
| **Total** | **85,986** | **99.9** |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana State Department of Health.

**Table 9.2 Percentage of Indiana's Pregnant Women Receiving Prenatal Care in the First Trimester, 1984 - 1990**

| | Number of Births | % Receiving Care in 1st Trimester |
|---|---|---|
| 1984 | 79,883 | 65.3 |
| 1985 | 80,928 | 70.0 |
| 1986 | 79,269 | 74.2 |
| 1987 | 78,515 | 75.3 |
| 1988 | 81,414 | 76.1 |
| 1989 | 83,201 | 76.3 |
| 1990 | 85,986 | 77.0 |

*Source*: Indiana State Department of Health.

**Table 9.3 Infants of Low and Very Low Birth Weight as a Percentage of Live Births, 1984 - 1990, Indiana**

| Year | Low Birth Weight | Very Low Birth Weight |
|---|---|---|
| 1984 | 6.3 | N/A |
| 1985 | 6.4 | N/A |
| 1986 | 6.4 | 1.1 |
| 1987 | 6.5 | 1.1 |
| 1988 | 6.6 | 1.2 |
| 1989 | 6.6 | 1.2 |
| 1990 | 6.6 | 1.2 |

*Note*: Low birth weight is less than 5.5 pounds (2,500 grams). Very Low birth weight is less than 3.3 pounds (1,500 grams).

*Source*: Indiana State Department of Health.

## Birth Weight

Babies weighing into the world at five-and-one-half pounds (2,500 grams) or more are generally more ready to begin their life journeys than those born at lower weights. Infants weighing less than 2,500 grams face numerous short- and long-term risks; infants born at very low birth weights (less than 1,500 grams) are the most vulnerable of all. Low birth weight is the largest factor contributing to Indiana's high infant mortality rate. Data for 1990 indicate that 6.6% of Indiana's infants were born at low birth weight, the same proportion as in 1989. The percentage of infants born at very low birth weights also remained the same in 1990 as in 1989, at 1.2% (Table 9.3). Although 1990 is the second year since 1986 that Indiana's annual rates of low and very low birth weight infants have not moved upward, the figures do not represent the progress hoped for.

### Prematurity vs. slowed fetal growth

Once, all low birth weight babies were identified as "premature," that is, born before the 37th gestational week (full-term is considered to be 40 gestational weeks). More recently, neonatologists have begun to distinguish preterm infants from those who are small-for-date. Because of slowed fetal growth, small-for-date babies weigh less than the average weight for 90% of all infants of the same gestational age. Both groups of low-birth-weight babies require special forms of medical intervention, as well as mental and social stimulation. These tiny infants must be helped to surmount not only their own potentially disabling physical conditions, but also the effects of the isolette environments in which they must live until able to survive on their own.

### Advances in neonatology

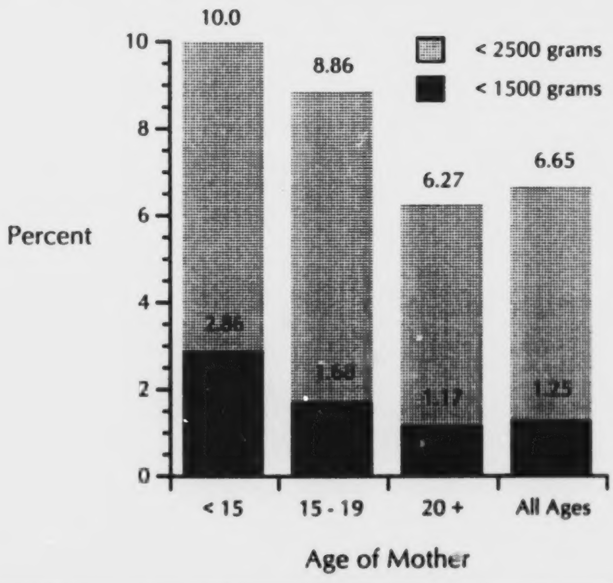
Dramatic advances in neonatology have increased the survival rates for infants of even very low birth weight. In 1938, only half the babies weighing *four* pounds or less survived the first 28 days of life. Fifty years later, in 1988, half of all babies weighing *two* pounds or less survived for at least 28 days.[1] Still, the shorter the gestational period and/or the lower the birth weight, the more problems an infant is likely to have, and the higher the cost will be to keep the infant alive. Prevention remains the most effective and humane strategy available to combat the effects of low birth weight. Since many factors are associated with premature and small-for-date births, there must be a variety of strategies for prevention.

## Factors associated with low birth weight

*Maternal Health and Well-being.* Women with histories of chronic diseases, prior difficult pregnancies, spontaneous abortions, and stillbirths may have problems carrying infants to term. Advances in early identification and prenatal care procedures have had a significant impact on increasing gestational spans in such high-risk pregnancies. Nevertheless, in the nation and in Indiana, progress has been slow toward meeting the year 2000 health goals of lowering the incidence of infants born at low-birth weight to no more than 5%, and that of very low birth weight to no more than 1% of all live births. Efforts at improving maternal health so as to combat low-birth-weight problems have been frustrated by social, economic, and behavioral factors.

*Age of mothers.* Factors such as physical development, drug and/or smoking habits, poor nutrition, and lack of prenatal care contribute to the likelihood that an infant will be of low birth weight. Teen mothers are particularly susceptible to these factors. In 1989, 21 (10%) of the 210 babies born to Hoosier women under the age of 15 weighed less than 2,500 grams (Figure 9.1). Low birth-weight babies were 8.9% of those born to 15- to-19-year-olds and 6.3% of those born to mothers over the age of 20. The rate of very low-

**Figure 9.1 Percentage of Infants Born at Low and Very Low Birth Weight, by Age of Mother, Indiana, 1989**



*Source*: Indiana State Department of Health.

birth-weight infants (under 1,500 grams) born to teens younger than 15 (2.9%) was nearly two and one-half times higher than among infants born to women over age 20 (1.2%).

Women under age 20 gave birth to 14% of all Hoosier infants in 1989, but this maternal age group bore 19% of all low-birth-weight babies, and nearly 20% of the very low-birth-weight babies. Risks faced by these fragile children are magnified when immature parents have difficulty in consistently following the often complex and expensive care routines that the infants require.

Additional aspects of teen pregnancy are discussed in more detail in Chapter 6.

***Although prenatal care and dietary supplements are available to women living in poverty and near poverty, such services are not always accessible. Moreover, services may not be sought, even when they are available.***

*Rising poverty.* Poverty raises multiple barriers to healthy pregnancy and normal birth weight. The most obvious are maintenance of good nutrition and access to regular medical supervision begun early in the first trimester. Chapter 2 discussed the rising rates of poverty and near poverty in Indiana households, particularly those headed by females or young couples. Although prenatal care and dietary supplements are available to women living in poverty and near poverty, such services are not always accessible. Moreover, services may not be sought, even when they are available. Such a combination of factors has kept nearly a third of the Hoosier women eligible for Women, Infants and Children (WIC) supplemental nutritional services from receiving them, for example. Undernourished women do not gain enough weight during pregnancy, increasing the likelihood that they will deliver underweight infants. Many poor and low-income women have long histories of dietary deficiencies that can be significantly improved, but not completely overcome, by supplements during pregnancy.

Another barrier to obtaining prenatal care may be finding a Medicaid provider. This can be especially difficult in rural areas with a scarcity of physicians and no public transportation. Ignorance, fear, pride, inadequate family supports, and reluctance to seek services because of past frustrations are also more likely to influence decisions made by poor women. The prenatal health of their infants is often further compromised by smoking habits, particularly high among low-income, inadequately educated white women of childbearing age.[2]

*Use of tobacco, alcohol and other drugs during pregnancy*. Connections between alcohol use by mothers and low-birth-weight and congenital problems in their infants were pointed out as early as the 1820s. Fetal alcohol syndrome as known today was not defined by the medical profession until the 1960s and only recently have physicians proscribed all use of alcohol during pregnancy. The detrimental impact of maternal smoking on birth weight was not systematically explored until the 1970s; the effects on fetal development of many illicit drugs currently in use are still not fully understood. The same remains true for some legal prescriptions and readily available over-the-counter medications. Research findings are accumulating, however, suggesting that pregnant women should avoid all medicines whenever possible. When avoidance is impossible, they should use medicines only under the close supervision of their physicians. Surveillance of risk factors from legal drugs and medications is obviously closely associated with access to medical care for women during pregnancy and for unrelated conditions. Through the Prenatal Substance Use Prevention Program (PSUPP), described below, Indiana has begun to monitor tobacco, alcohol, and other drug use by pregnant women. The first statewide data are expected in 1993.

## Coordinated care needed

Even this overview of the intersection of some of the maturational, medical, socioeconomic, geographic, and drug-use factors that relate to one problematic outcome of pregnancy—low birth weight—points up the complexity of prevention strategies. An accessible, coordinated system of care to guide a pregnant woman and her family through the program labyrinth to needed services is a prerequisite for progress in reducing the numbers of infants born too small or too soon.

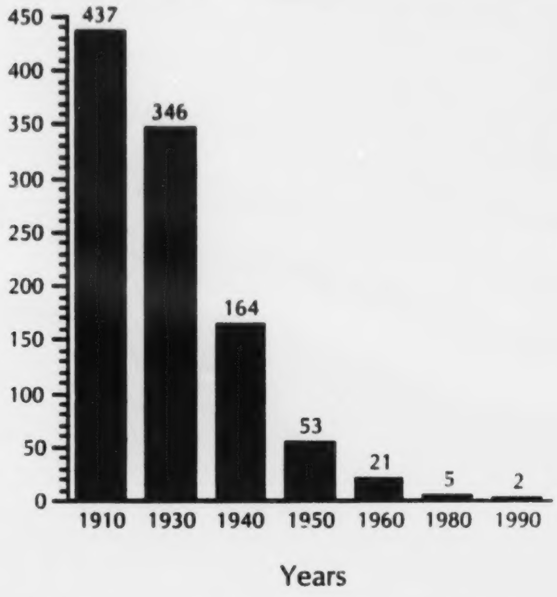
Indiana is making progress. The state now pays for coordination of prenatal care for high-risk women who are poor or low-income (less than 150% of the poverty level). The toll-free Indiana Family Helpline can help families locate service providers in their own counties (see Box).

**Indiana State Department of Health**
Maternal and Child Health Services
Family Wellness Helpline
**1-800-433-0746**

The Indiana State Department of Health's toll free Family Wellness Helpline was launched in May 1988. The Helpline was designed to assist callers with questions about maternal and child health. A communications specialist is on duty from 8:00 a.m. through 4:00 p.m., Monday through Friday. Messages may be left on the answering machine at other times.

The majority of calls have been generated by the Medicaid card which lists the number, by word of mouth, and by listing on health campaign literature. Callers request information about a wide range of subjects. Needs are assessed by the communications specialist, and callers are referred to appropriate community resources. Follow-up calls are made or letters sent to find out if satisfactory services were received. Staff serve as advocates for callers, when needed. The Helpline is also useful to Maternal and Child Health staff. It enables them to keep a "pulse" on the challenges facing families with limited resources who are trying to obtain care.

**Figure 9.2 Number of Maternal Deaths in Indiana, 1910 - 1990**



*Source*: Indiana State Department of Health.

## Maternal Mortality

Real progress has been made in reducing the risks of pregnancy. In 1910, 437 Hoosier women died as an outcome of childbirth. Eighty years later, there were only 2 maternal deaths in Indiana (Figure 9.2), a decline from four in 1989 and five in 1980. The year 2000 target rate is 3.3 maternal deaths per 100,000 live births. Indiana's rate of 2.3 per 100,000 live births in 1990 already exceeded this goal.[3]

## Infant Mortality

Looked at historically, it is clear that tremendous progress also has been made in lowering infant mortality rates (Table 9.4). In 1900, one in six Hoosiers died in infancy. Indiana's infant mortality rate has been above the national average for many years. Between 1984 and 1989, more than one Hoosier baby in a hundred did not live to celebrate its first birthday. The infant mortality rate fluctuated between 10-11 per 1000 live births during this period (Table 9.5). The good news is that Indiana's infant mortality rate for 1990 has declined to 9.6 per 1000 live births. The neonatal mortality rate (deaths up to 28 days following birth) declined from 6.5 per 1000 live births in 1989 to 6.1 in 1990. The post-neonatal mortality rate (deaths from 28 days up to one year) also declined, from 3.7 to 3.5 per thousand live births.

**Table 9.4 Infant Mortality, Indiana, 1900 - 1990, Number and Rate per 1,000 Live Births**

| Year | Number | Rate |
|---|---|---|
| 1900 | 6,616 | 163.0 |
| 1930 | 3,423 | 57.7 |
| 1960 | 2,729 | 24.2 |
| 1990 | 827 | 9.6 |

*Source*: Indiana State Department of Health.

In 1989, with an infant mortality rate of 10.2 per 1000 live births, Indiana was above the national average of 9.8 and ranked 38th among the 50 states and the District of Columbia.[4] Indiana still has a long way to go in reducing infant mortality if the state is to meet the year 2000 target of no more than 7.0 deaths per 1000 live births. Target rates for neonatal and post-neonatal deaths are 4.5 and 2.5 per 1000 live births, respectively. Indiana's best hopes for progress lie in strategies that will bring more women into early and continued prenatal care and strategies that will increase participation in other intervention programs to prevent low birth weights.

**Table 9.5 Infant Mortality Rates, Indiana, 1984 - 1990**

| Year | Rate per 1,000 Live Births |
|---|---|
| 1984 | 10.5 |
| 1985 | 10.9 |
| 1986 | 11.2 |
| 1987 | 10.0 |
| 1988 | 11.0 |
| 1989 | 10.2 |
| 1990 | 9.6 |

*Source*: Indiana State Department of Health.

## Maternal and Child Health Programs in Indiana

The most ambitious of the current programs for maternal and child health is the Step Ahead Initiative, established by the Indiana General Assembly in July 1991. Although initiated as one of the governors' strategies for life-time learning, Step Ahead is currently administered by the Indiana Family and Social Services Administration. The initiative is not a single program; rather it creates a process through which each of Indiana's 92 counties will be able to build a coordinated, comprehensive system for the delivery of education, health, and social services for children from birth through age 13. Maternal and Child Health staff have worked closely with initiative staff and the local governing councils as they organize, develop, and refine the local needs-assessment processes. All local agencies providing health services to pregnant women and children have been encouraged to participate in local Step Ahead governing councils. The Step Ahead Initiative is discussed in more detail in Appendix A.

### Healthy Pregnancy/Healthy Baby Campaign

In response to the low rate of pregnant women receiving early prenatal care and the correspondingly high infant-mortality rate in Indiana, the Healthy Pregnancy/Health Baby Campaign was initiated in October 1988 by the Community Outreach Team of the Maternal and Child Health Services of the Indiana Department of Health. The target population is adolescents, women without high-school diplomas, and low-income women. The campaign aims to help women obtain early pregnancy testing, prenatal care, adequate nutrition and social supports necessary for the delivery of full-term, healthy babies. In addition to a confidential pregnancy-testing program, follow-up services include referral to sources of ongoing prenatal care, WIC and Medicaid enrollment. Other services encourage completion of high school or high-school equivalency certificates (GEDs). The campaign also assists local communities and the Maternal and Child Health Services program to identify service gaps and plan future programs.

In FY 1991, according to campaign reports, 107 agencies across the state participated and provided pregnancy testing for more than 25,000 Hoosier women. Of the 8,493 women with positive tests, six in 10 had incomes below the poverty level, while three in 10 had incomes from 100- to 185% of the poverty level. Of those with positive tests, 44% had less than a high-school education and 3,493 (41%) were women 19 years of age and younger. Campaign staff feel that the program is reaching the intended target population.

In FY 1991, there were increases in the proportions of women with positive pregnancy tests who were referred to WIC, to Medicaid, and for educational services. The campaign makes concerted efforts to document follow-up for the prenatal-care referrals made. In each year of the campaign, the record has improved markedly. In FY 1989, 77% of women with positive tests were referred for prenatal care. In FY 1990, the proportion increased to 88%. In FY 1989, only 17% of the women referred had documented, confirmed appointment dates; in FY 1991 the proportion was 41%. The proportion of the referred women who kept their first appointments also rose, from 9% in FY 1989 to 28% in FY 1991.[5] Because no funds were available for additional monitoring of the program, no documentation is available to show whether 3,419 of the pregnant women referred for follow-up prenatal care actually kept their first appointments and continued to receive care throughout their pregnancies. Much more remains to be learned about what keeps women from securing the benefits of available care.

## Prenatal Substance Use Prevention Program (PSUPP)

The Prenatal Substance Use Prevention Program (PSUPP) is funded by the Indiana Department of Mental Health through the Indiana State Department of Health. As noted in the initial evaluation, the 1991-1992 goal of the program was to assure that Indiana women would decrease or eliminate alcohol and other drug use during pregnancy.[6] PSUPP had three components. An education program using both literature and the media informed the public about the potential hazards of alcohol and other drug exposure to an unborn child. A conference and training program for health professionals stressed the need for identifying pregnant women using a substance of potential harm to themselves or their infants. This program included training in how to screen, intervene, and follow up with pregnant women and drug-exposed infants. Community-based service programs were developed at four sites (Lake, Allen, Vigo, and the "Tri-Cap" area of Pike, Spencer, Dubois, and Warrick counties).

Clients of the Maternal and Child Health Clinics in the four PSUPP sites were screened for substance abuse in 1991. Over a third (38%) of the 1,632 women screened were found to be at "high risk." High risk meant meeting one or more of these criteria:

- Smoked more than five cigarettes daily.
- Used medication (prescription or over-the-counter) without a physician's supervision.
- Drank two or more alcoholic beverages per day or drank more than five at one time (binge drinking).
- Used any "street drugs."

While there was variation in the rigor of data collection at the sites, some consistent patterns emerged.

Most of the women were white, relatively young (median age 21), and nearly half had not completed high school. Fewer than one in ten had any postsecondary education. Among the women classified as high risk, smoking patterns presented the most frequent risk to infants, followed by drinking, use of street drugs, and use of medications without their physicians' knowledge. Nearly four in ten of the smokers had begun before the age of 15, while some seven in ten users of alcohol and street drugs had begun use between the ages of 15 and 20. Very few of these women reported prior participation in formal intervention programs. For those who had tried to stop or cut down their use of cigarettes and/or alcohol, doing it on their own without any help was the most frequent method.

Data on actual behavioral change as a result of PSUPP participation are limited, but encouraging. About eight in ten alcohol or drug users reported that they had stopped. Quitting smoking altogether seemed to be more difficult; only two in ten women reported that they had done so, but another six in ten reported cutting back on tobacco use. Clients reported feeling much better informed about the impact of tobacco, alcohol, and other drug use on their unborn children. Most clients also thought that the program had been very helpful. Data collection methods for PSUPP participation and outcomes have been greatly improved, and much more will be known about the effectiveness of the program when the evaluation study is completed in 1993. In addition, a study of birth certificate information will, for the first time, provide statewide estimates of substance use among pregnant women.

***For every dollar spent through the WIC program, an estimated three dollars are saved in short-term health costs to overcome the effects of low birth weight.***

## Women, Infants and Children Program (WIC)

A healthy start in life also requires that mother and child receive nutritious foods, a goal beyond the reach of many families. The Special Supplemental Food Program for Women, Infants, and Children (WIC) serves pregnant and breast-feeding women, infants and young children from low-income families (less than 185% of the federal poverty level). The Indiana State Department of Health estimates that 48% of the babies born in Indiana in 1991 were eligible for WIC benefits. Since 1974, hundreds of thousands of Hoosier women and their children have been aided by the WIC program at times when they are particularly vulnerable to the damaging and long-lasting effects of inadequate nutrition. For every dollar spent through the WIC program, an estimated three dollars are saved in short-term health costs to overcome the effects of low birth weight.[7] WIC is one of the most cost-effective safety net programs available.

The state's WIC program is administered by the Division of Nutrition, Bureau of Family Health Services of the Indiana State Department of Health. Clinic sites provide WIC services in all 92 Indiana counties. WIC in 1974 served 1,169 persons a month at an annual cost of $19,000; by 1991, WIC served an average of 123,439 persons a month for an annual cost of $64,729,340. In 1991, however, WIC services cost the state of Indiana only $190,000. Federal funding covered $50,577,720 of the program costs, while rebates from infant formula manufacturers added $13,961,620. WIC provides vouchers for the purchase of iron-fortified infant formula and other foods of high nutritional value, such as milk, cheese, eggs, dry cereal, Vitamin C juices, peanut butter, and beans.

Vouchers may be used in certified local groceries and pharmacies. Since 1974, WIC has brought nearly $207 million in new federal dollars into local Hoosier economies.[8]

WIC is not an entitlement program; a state may serve as many eligible teens, women, and children as possible, within the limits of financial resources. In FY 1991, a total of 211,000 persons in Indiana received WIC benefits. Despite major efforts to expand services in the past year, benefits reached only about 68% of all potentially eligible Hoosiers. Estimates suggest that some 28,000 eligible women and more than 71,000 eligible children are not currently receiving WIC benefits.

Table 9.6 describes the program participants in 1991. WIC programs are serving primarily very-low-income women and children. Only 27% of the WIC participants were also receiving AFDC benefits, and only 45% were also receiving food stamps. Of those enrolled in the WIC program in 1991, more than three-fourths (77%) had incomes under the federal poverty level and another 8% had incomes between 100% and 125% of the poverty level. Only 15% of all WIC program enrollees had incomes that fell between 126% and 185% of the poverty level.[9]

**Table 9.6 Number and Characteristics of Indiana Women and Children Enrolled in WIC, 1991 (Unduplicated Count)**

| | Number | % |
|---|---|---|
| Prenatal | 44,252 | 21.0 |
| Breastfeeding women | 3,363 | 1.6 |
| Postpartum women | 11,966 | 5.7 |
| Infants | 70,938 | 33.6 |
| Children ages 1 - 2 | 49,462 | 23.4 |
| Children ages 3 - 4 | 31,019 | 14.7 |
| **Total** | **211,000** | **100.0** |

*Source*: Indiana State Department of Health.

The WIC program is an important source of nutritional benefits to Indiana's homeless population, many of whom suffer from malnutrition and/or vitamin deficiencies because of their inadequate and irregular eating patterns. In 1991, 1,113 homeless mothers and their young children participated in the WIC program in Indiana. The Department of Health reports that the number of homeless participants has been growing by about 50 per month since 1991.

## Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT)

The Early and Periodic Screening, Diagnosis and Treatment Program (EPSDT) is a preventive health care program available to all Medicaid recipients from birth to their 21st birthday, mandated by the federal 1989

Omnibus Budget Reduction Act (OBRA). In Indiana, the EPSDT program is called HealthWatch, and follows the periodic examination schedule recommended by the American Academy of Pediatrics. Physicians and nurse practitioners enrolled in the Medicaid program are eligible to become HealthWatch providers. A HealthWatch screening must include, at a minimum:

- A health and developmental history, including assessment of both physical and mental health development.
- An unclothed physical examination.
- A nutritional assessment.
- A developmental assessment.
- Vision observation at each screen; direct referral to an optometrist or ophthalmologist starting at age 3 years.
- Hearing observation at each screen; objective testing with audiometer at age 4 years administered or referred.
- Immunization administered or referred, if needed at the time of the screen.
- Laboratory tests, including blood lead level assessment appropriate for age and risk factors.
- Health education, including anticipatory guidance.[10]

In addition, children ages 18 months and older must be referred to a dentist for dental screening. The hearing test within the HealthWatch screen is for children at age 4. Thereafter, unless the child is at risk for hearing problems, further screening is not done through HealthWatch; children are given audiometric tests by the Department of Education in grades 1, 4, 7, and 10.

If a child comes under care for the first time at any point on the HealthWatch screening schedule or if any items are not accomplished at the suggested age, the schedule should be brought up to date as soon as possible. Young people up to age 21 who are enrolled in the Indiana Medicaid program must receive health care, diagnostic services, and treatment to correct or ameliorate defects, physical and mental illnesses or conditions whether the defect, illness, or condition was identified through a HealthWatch screen or some other medical examination.

The federal OBRA legislation of 1989 requires that all states provide EPSDT screens to 80% of their eligible Medicaid populations by 1995.

Indiana has one of the lowest EPSDT participation rates in the nation. During FY 1991, only 26,548 (10%) of the 261,837 Medicaid eligible children and adolescents received HealthWatch screening services. This figure is artificially lowered, however, by current methods of data collection based on billing codes. Although EPSDT screens may be provided and bills for services submitted under several codes, only those screens billed to HealthWatch programs are recorded. Even if all screens were tabulated, however, the numbers served would remain low.

The proportion of children receiving EPSDT services varies greatly from one county to another. The highest participation rates in FY 1991 were in Dubois (38%), Lawrence (37%), Orange (37%), and Wayne (35%) counties. Lowest participation rates were in Steuben (.5%), Hamilton (.9%), Bartholomew (1%), and LaGrange (1%) counties. The proportion of eligible young people who received services also varied by age (Table 9.7).

Although all eligible families are informed of the availability of HealthWatch services, actual use is affected by the number of available and accessible service providers. Seven counties have no EPSDT providers. Another 17 counties have only one provider each. In 35 counties, some providers do not accept new patients, or they restrict their patient populations by age. In some instances, the only available services are provided by a Maternal and Child Health Clinic. Complex oversight processes and long delays between submitting claims and receiving reimbursement for services have kept many potential providers from participat-

**Table 9.7 Participation in Indiana's HealthWatch Program*, By Age, FY 1991**

| | Age Group | | | | |
|---|---|---|---|---|---|
| | Under Age 1 | 1 - 5 | 6 - 14 | 15 - 20 | All Ages |
| Number of children eligible for EPSDT services | 57,642 | 90,883 | 81,595 | 31,717 | 261,837 |
| Total number of screening services | 11,466 | 12,221 | 3,416 | 508 | 27,611 |
| % of eligibles receiving screening services | 19.9 | 13.4 | 4.1 | 1.6 | 10.5 |

*HealthWatch is Indiana's program for Early and Periodic Screening, Diagnosis and Treatment (EPSDT).

*Source*: Indiana Department of Public Welfare.

ing in HealthWatch. The Office of Medicaid Policy and Planning implemented a number of system changes in 1992 that will make the HealthWatch claims process easier for providers. It is hoped that these changes will increase the number of providers actively participating in the HealthWatch program, which will, in turn, increase the numbers of children receiving EPSDT services in Indiana.[11]

## Notes

1. M. E. Avery cited in E. Rosenthal, "As More Tiny Infants Live, Choices and Burden Grow," *New York Times* (September 29, 1991) p. 1Y.

2. National Institute on Drug Abuse, *National Household Survey on Drug Abuse: Main Findings 1990* DHHS Publication No. (ADM) 91-1788 (Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1991).

3. Indiana State Department of Health, Maternal and Child Health Division, *Annual Report, Fiscal Year 1991* (Indianapolis: Indiana State Department of Health, July 1992), p. 33. Historical data supplied by Indiana State Department of Health, Public Health Statistics, 1992.

4. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1992* (Washington, DC: Center for the Study of Social Policy, 1992), p. 51.

5. Bureau of Family Health Services, Maternal and Child Health Division, Indiana State Department of Health, *Annual Report: Fiscal Year 1991* (Indianapolis: Indiana State Department of Health, 1992); Systems Development Section, Bureau of Family Health Services, Division of Maternal and Child Health, Indiana State Department of Health, *Healthy Pregnancy/Healthy Baby Campaign; Third Annual Summary Report: November 1990 - October 1991* (Indianapolis: Indiana State Department of Health, 1992).

6. 1991-1992 PSUPP proposal. Cited in T. Zollinger and Associates, *Prenatal Substance Use Prevention Program; Community-Based Service Delivery System Component: Evaluation Report.* (Carmel, IN: T. Zollinger and Associates, 1992).

7. Children's Defense Fund, *The State of America's Children, 1991* (Washington, DC: Children's Defense Fund, 1991), p. 6.

8. Indiana State Department of Health, *WIC Annual Report: Fiscal Year 1991* (Indianapolis, IN: Indiana State Department of Health, 1992).

9. Indiana State Department of Health, *WIC Annual Report, Fiscal Year 1991.*

10. Memorandum to All Indiana Medicaid Physicians, Clinics, and Nurse Practitioners from the Indiana State Department of Health, October 19, 1992.

11. All HealthWatch data supplied by the Division of Family and Children, Management Information Services, Indiana State Department of Health, 1992.

Chapter 10

# Challenges to Health and Well-Being

## Infectious Diseases

A number of diseases such as tuberculosis, measles, and mumps—thought to have been nearly eradicated in the United States—are beginning to make a comeback. The great progress made in the 20th century was made possible by a three-pronged assault on communicable diseases: vaccines supplied lifetime or long-term immunity; drug and medical technologies provided effective remedies; and a newly established public-health infrastructure provided access to prevention, diagnostic and therapeutic services, and addressed environmental factors in the spread of disease. Advances in medical technology continue, but public health achievements in prevention and access to treatment—which are not as immediate or concrete in impact—have not kept pace. When prevalence of many common diseases abated, a false sense of security led to budgetary cuts for public programs that supported control of infectious disease. For their part, many parents became lax in following recommended immunization schedules.

### Medical technology

Progress continues in the development of drug and medical technologies. Vaccines, antibiotics, and other treatments to fight infectious diseases are continually refined and have greatly reduced morbidity and mortality rates among child victims. In other medical areas, acute childhood leukemia, for example, improved therapy allows a majority of victims to recover. Organ transplantation is another technology granting years of life to youngsters stricken with previously fatal conditions. Each advance, however, gives rise to issues relating to accessibility and affordability of treatment.

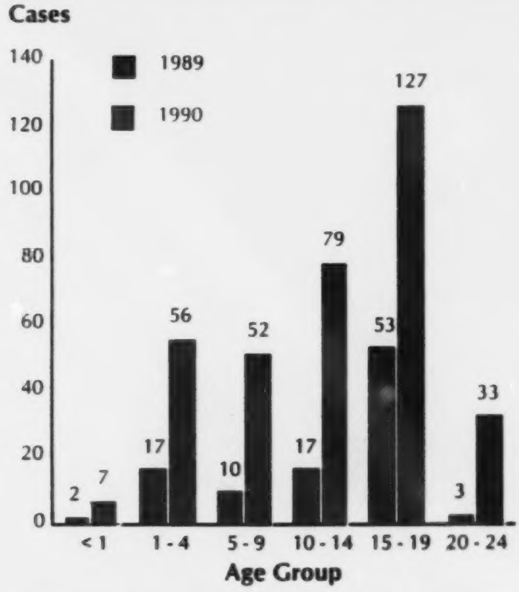
## Public health systems

Declining budgets and, in some cases, beliefs that problems essentially had been conquered have eroded public health programs. The rise in cases of HIV/AIDS infection, with the opportunistic infections that accompany this disease, has challenged the capacity of health systems to respond. The HIV crisis has raised numerous issues of professional ethics growing from the need to balance individual rights and protection of the community. Current trends provide reasons to believe that the number of HIV/AIDS cases in Indiana will continue to grow well into the next century. Pediatric and young adult HIV/AIDS morbidity is discussed further in Chapter 6.

*Immunizations*. Some of the most disheartening issues in disease control are to be found on the third front—immunization practice. Although safe and effective vaccines are available for most of the contagious diseases of childhood, use has declined. Cost is one factor: several manufacturers, faced with declining revenues and rising legal expenses, have stopped producing certain vaccines, prompting remaining producers to increase prices.

Lack of concern is a more difficult factor to overcome. For example, the federal government cut the Childhood Immunization Initiative budget by one-third. This program provided education for parents and caregivers, as well as money to support immunizations. Following cuts in the program, disease rates began to rise again. National statistics on immunization rates, however, have not been available since the federal government stopped collecting such data in 1985. Reported cases of measles and mumps in Indiana in 1989 and 1990 are graphed in Figures 10.1 and 10.2.

**Figure 10.1 Reported Cases of Measles in Indiana, by Age, 1989 - 1990**



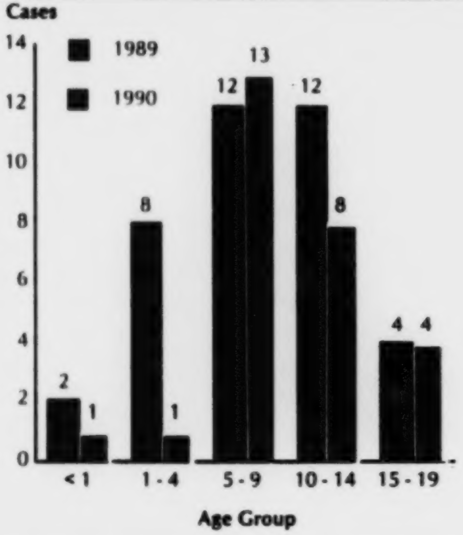
*Source*: Indiana State Department of Health.

Parents, too, have relaxed their concerns about childhood diseases mistakenly believed to have been eradicated. It has taken state laws requiring proof of immunizations for school entry to secure widespread compliance with recommended immunization protocols. Some 90% of American children enter school fully immunized. Through the cooperative efforts of the Indiana State Department of Health and school administrators, Hoosiers have done even better, with a rate of over 95% for the 1991-1992 school year. This figure includes both public and private schools.

Both nationally and in Indiana, however, the picture is less encouraging for two-year-olds. Through retrospective study of the immunization records of children entering schools, health officials estimate that only 53% of Hoosier two-year-olds have had the full complement of recommended immunizations for their age group in 1990. Improvement is being made in this area as well: only 47% of two-year-olds had been fully immunized in 1988 (Figure 10.3).

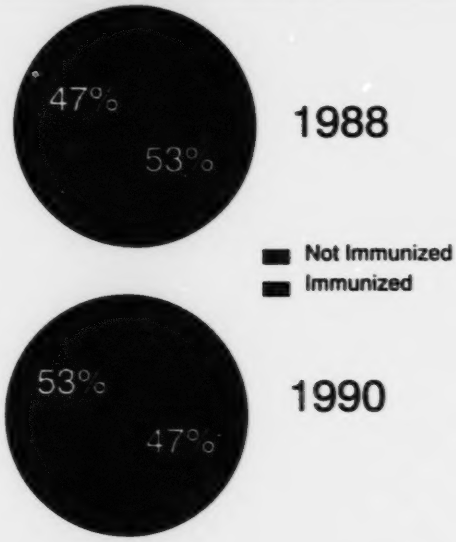
Recent outbreaks of measles have changed the immunization protocol to include another "measles shot" at grade 6. In 1991-92 more than nine in ten sixth-grade Hoosiers received this additional immunization. The impact of Indiana's stepped-up measles campaign was immediate. Measles cases, which had risen from 115 in 1989 to 412 in 1990, fell to six in 1991, a dramatic reminder of the importance of immunization.

**Figure 10.2 Reported Cases of Mumps in Indiana, by Age, 1989 - 1990**



*Source*: Indiana State Department of Health.

**Figure 10.3 Percentage of Indiana Children Fully Immunized at Age 2: 1988, 1990**



*Note*: Based on a retrospective study of the immunization records of 5-year-olds entering school.

*Source*: Indiana State Department of Health.

## Tuberculosis

Indiana has not yet experienced the sharp increase in incidence of tuberculosis (TB) associated elsewhere in the nation with rises in homelessness and in cases of HIV/AIDS infection. Between 1987 and 1991, the reported incidence of TB per 100,000 population in Indiana declined from 5.4 to 4.7. For the past five years, there have been fewer than 25 cases of tuberculosis diagnosed annually among Hoosier children and young adults (Table 10.1). These numbers consistently represent about 9% of all Indiana cases. Although in 1991 tuberculosis was diagnosed among individuals who ranged in age from 10 months to 99 years, TB remains primarily a disease of older adults. In 1991, 43% of all Indiana cases were found in adults ages 65 and older; the average age for all cases was 56.6 years.

**Table 10.1 Tuberculosis Cases in Indiana, 1987 - 1991**

| Age | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|
| 0-4 | 7 | 4 | 6 | 4 | 7 |
| 5-14 | 2 | 1 | 4 | 5 | 4 |
| 15-24 | 13 | 16 | 14 | 8 | 13 |
| **Total: All Ages** | **299** | **295** | **261** | **269** | **263** |
| Incidence per 100,000 population | 5.4 | 5.3 | 4.7 | 4.9 | 4.7 |

*Source*: Indiana State Department of Health.

The fact that it is relatively rare does not make tuberculosis among infants and young children any less a matter for concern. Among these age groups, the disease can progress rapidly and turn into life-threatening tuberculosis meningitis. Public health officials believe that among infants and young children, the disease should be 100% preventable through early diagnosis of adult cases and appropriate follow-up testing of their contacts. Child care institutions, juvenile detention facilities, and shelters for the homeless are potential sites in which the disease could be spread among children. The goal for the year 2000 is to lower incidence of tuberculosis to 3.5 per 100,000. Statewide incidence in Indiana has remained essentially unchanged for the past three years. Additional efforts will be needed, if the state is to meet this goal.

# Childhood Lead Poisoning

As research findings increase concern about the effects of childhood lead poisoning, there is a growing awareness of the severity and extent of this issue as a national health problem. Children younger than age six are particularly vulnerable to poisoning from lead. Even slightly elevated lead levels in the blood are associated with mild learning disabilities, while higher levels may result in permanent physical and mental retardation, as well as additional problems such as hyperactivity, digestive tract disturbances, hearing loss, and even death.

Modes of contamination include breathing emissions from automobiles and farm vehicles that run on leaded gasoline, drinking water that has run through lead pipes, ingesting contaminated soil, and, most frequently, ingesting lead paint chips and breathing dust from indoor and outdoor lead-based house paints applied prior to 1980. Indiana residents are made potentially more vulnerable because of the age of the state's housing stock, 85% of which was built before 1980.[1]

In programs conducted nationally, some 17% of the children screened were found to have elevated blood levels, that is, above 10 micrograms per deciliter (written as: 10 ug/dL). Similar results have been found in Indiana. Statewide testing estimated 16% of Hoosier children screened to have blood lead levels greater than or equal to 15 ug/dL. Children living in older urban dwellings, particularly those living in poverty who have diets already low in iron and calcium, are at highest risk of lead poisoning from this insidious source.[2]

***Health officials trying to reduce lead poisoning have found themselves working toward a moving target of changing standards and screening criteria.***

Research has shown that *all* children in the six-month to six-year-old age group are at potential risk for lead poisoning—regardless of the socioeconomic status of their families. The Centers for Disease Control guidelines strongly recommend *universal* screening for all children. Health officials trying to reduce lead poisoning, however, have found themselves working toward a moving target of changing standards and screening criteria. Objectives for 1990 proposed by the U.S. Department of Health and Human Services sought to decrease the prevalence of lead toxicity among children ages birth to 5 to fewer than 500 per 100,000 (.5%) and to bring 90% of all children identified with lead toxicity under medical and environmental management. Following new research findings, these standards were greatly lowered in the year 2000 health goals, from 25 ug/dL to 10 ug/dL. Testing for the reduced safety levels requires more sophisticated laboratory equipment.

Striving to meet the 1990 objectives, Indiana established the Childhood Lead Poisoning and Prevention Program and began screening in 1983. The numbers of cases discovered in several Indiana counties indicated the need for more extensive screening and follow-up programs. Since 1988, ten regional centers have directed lead screening to children ages six months through five years in families with incomes below 185% of the federal poverty level. All children enrolled in Maternal and Child Health clinics, the WIC program, and public health immunization clinics were provided access to lead screening and a medical, developmental, psychosocial, nutritional, and environmental referral system. It was hoped that the screening program would determine the existence and extent of lead poisoning in all Indiana counties by 1996.

***Had the current standards for safe blood-lead levels in children been in effect throughout 1991, more than double the number of Hoosier children would have been referred for follow-up services.***

Between 1983 and the end of FY 1991, 86,876 Indiana children were screened for lead poisoning. Of these, 8.5% required follow-up evaluation. A total of 933 children (1% of the those screened) had confirmed lead poisoning, that is, blood lead levels in excess of 25 ug/dL. This is about double the 1990 prevalence goal (.5%). It must be kept in mind, however, that this goal was set for the entire U.S. population; screening in Indiana has been conducted primarily among the state's children at highest risk for lead poisoning.

All indicators suggest that the numbers of poor and near-poor Hoosier children will continue to rise. This is particularly true for the age group at highest risk of lead poisoning—those under the age of 6. Growing numbers of children eligible for lead screening services have not been the only challenge faced by health professionals.

In October 1991, the Centers for Disease Control released *new standards* based on research that showed adverse effects from blood lead levels previously thought to be safe. The lead level considered safe dropped from 25 micrograms to 10 micrograms per deciliter of blood (10 ug/dL). The new standard meant that blood lead concentration between 10-14 ug/dL would trigger community-wide childhood lead-poisoning prevention activities. Children found to have blood lead levels between 15-19 ug/dL were to receive follow-up nutritional and lead education services. Children with blood levels over 20 ug/dL were to receive additional environmental evaluation and remediation, as well as further medical evaluation and intervention, as needed. Had the new standards already been in place in FY 1991, the number of tested children with confirmed lead poisoning would have more than tripled. Table 10.2 presents information about screening and follow-up in FY 1991. Screening implications for the state, applying the new safety threshold, are presented for FY 1991.[3]

**Table 10.2 Interventions Needed Among Indiana Children Screened for Lead Exposure, in FY 1991; 1985 and New Standards Compared**

| | 1985 Standards ≤ 25 ug/dl | | New Standards ≤ 10 ug/dl | |
|---|---|---|---|---|
| | **Number** | **%** | **Number** | **%** |
| Number of children 6 months to 6 years screened for lead toxicity | 17,648 | 100 | 17,648 | 100 |
| Number of children needing follow-up evaluation | 1,586 | 8.99 | 3,188 | 18.06 |
| Number of children screened with confirmed lead poisoning | 223 | 1.26 | 915 | 5.18 |

*Source*: Indiana State Department of Health.

Meeting the new standards was further complicated by the fact that much of the equipment used for testing in Indiana (as has been true for most other states) was not sensitive enough to detect blood lead levels at the new safety threshold. Data for Marion County illustrate the difference in results when tests are made with highly sensitive equipment and the new standards are applied. Of the Marion County children screened in 1991, 23% were found to have blood levels above the new safety threshold of 10 ug/dL. In 1990, 9% of the children screened were found to have blood lead levels above the old safety threshold of 25 ug/dL.[4] Applying the new standards will mean providing follow-up services, including lead abatement at the source, where possible, for many more children.

The Surgeon General's new health goals for the year 2000 include revised national objectives that conform to current knowledge about lead toxicity levels.[5] To promote compliance with national goals, new federal regulations mandating that the state provide screening for all children on Medicaid went into effect in October 1992. Additional environmental and lead-abatement standards for public housing and units qualifying for Section 8 rental subsidy are under consideration. While Indiana has made considerable progress toward understanding and dealing with childhood lead poisoning, lead screening and environmental lead-abatement programs will require additional resources to reach the year 2000 goals and to bring ongoing access to lead poisoning prevention within the reach of every Hoosier family.

# Access to Health Care

## Private health insurance

**_Many Hoosier children under age 18 are not covered by any form of publicly funded or private health insurance._**

Access to health care is a growing issue for American families. As outlined in Chapter 2, changes in the Hoosier economy have been accompanied by an erosion in purchasing power for many Hoosier households—particularly those with young children. Private health insurance for spouses and/or children has become unaffordable, even though a wage earner may receive personal coverage as an employer-paid benefit. Hardest hit are low-income households with only one wage earner, or where several part-time jobs with few or no health benefits bring in total incomes above eligibility guidelines for Medicaid, but below a level with sufficient discretionary income to facilitate purchase of health insurance.

The best available estimates of Hoosier children under age 18 who are not covered by any form of publicly funded or private health insurance come from the annual Current Population Surveys conducted by the U.S. Bureau of the Census, cited in the *KIDS COUNT Data Book, 1993*.[6] The five-year average for the period 1988-1992 showed that nearly 13% of Hoosier children—about 185,000—had no health insurance. The most recent figure was down from the 20% average for 1980-1984, a period of severe economic recession in Indiana. Some of the recent reduction also can be attributed to increased numbers of children covered by Medicaid, as well as improvements in the state's economy.

## Medicaid coverage

Medicaid is an insurance program funded by both state and federal dollars. It reimburses health care providers for services rendered to persons meeting eligibility requirements. Included in the Indiana Medicaid program package are physician, dental, chiropractic, and optometric services; prescription and nonprescription drugs; inpatient hospital care; outpatient hospital and clinic services; nursing home services; physical and occupational therapy; eye glasses and prosthetic devices; transportation, and other health-related services. The federal government mandates certain eligibility standards, but gives states the option of extending coverage beyond the minimum. Funding for Medicaid is administered by the Family and Social Services Administration and represents the largest share of the Indiana public welfare budget. As is true for several other welfare programs, costs are shared by the federal government which contributes 62 cents of each Medicaid dollar spent in Indiana.

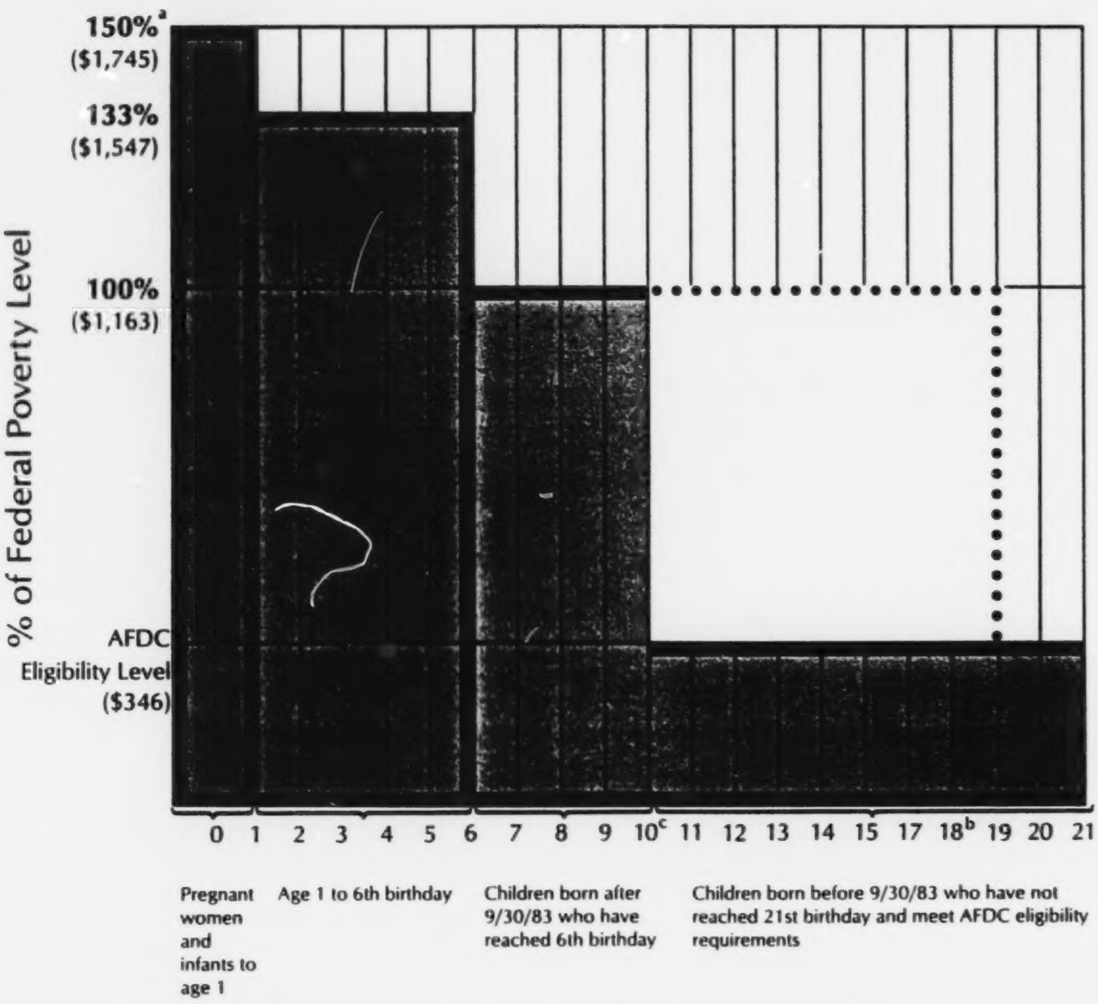
Eligibility criteria for women and children are a complex mix of age, income, residency, citizenship, and resource factors. Age and income criteria are depicted in Figure 10.4.[7] Also eligible for full Medicaid coverage are women and children up to age 18 who are receiving Assistance to Families with Dependent Children (AFDC); individuals ages 18, 19, and 20 who meet eligibility requirements for AFDC; and individuals receiving cash benefits under the federal Supplemental Security Income (SSI) program who meet AFDC requirements.

In April 1992, eligibility was expanded to include care related to pregnancy for women with incomes that exceeded AFDC criteria, but were less than 150% of poverty level (incomes of $1,745 per month for a family of four; $1,446 for a family of three). Full Medicaid coverage for their newborn children is provided for the first year of life. Young children between their first and sixth birthdays may also receive full Medicaid coverage if they live in families with incomes below 133% of the poverty level ($1,547 for a family of four; $1,282 for a family of three).

Finally, full Medicaid coverage is being phased in for children born after September 30, 1983, living in families with incomes below the federal poverty level ($1,163 for a family of four; $964 for a family of three). By the year 2002, this provision will fully cover children up to their 19th birthdays; currently it covers children through age nine only. Thus, a great many Hoosier children ages 10 through 18, who do not meet AFDC financial criteria but are living below the poverty line, are neither covered by Medicaid nor can their families afford private insurance plans.

In Fiscal Year 1981, Indiana's Medicaid program paid $444.8 million in claims for an average of 122,917 recipients per month. In FY 1992, Medicaid paid $2,099,933,945 in claims for an average of 253,811 recipients per month. Medicaid costs constituted 69% of all FY 1992 expenditures for public assistance by the Indiana Division of Family and Children. The growth in use of Medicaid is a further reflection of growing economic distress among Hoosier families. In FY 1992, 7% of all Hoosiers were enrolled in the Medicaid program, up from 6% in FY 1991, and 5% in 1990. Figure 10.4 shows the current Medicaid coverage categories for AFDC recipients, as well as expanded coverage for low-income pregnant

**Figure 10.4 Basic Medicaid Coverage for Pregnant Women and Children in Indiana, 1992**



*Notes:* [a] Gross family income limits for family of four shown in parentheses.

[b] Youths ages 18, 19, and 20 who meet AFDC eligibility criteria and remain eligible for medicaid coverage.

[c] Children born after September 30, 1983, who are living below 100% of the federal poverty level are eligible for Medicaid coverage until their 19th birthdays. This eligibility criterion now means that children who are 9 years old are covered. The first one-year birth cohort remains eligible each year through 2002, if income criteria are met.

*Source:* Prepared by the Indiana Youth Institute from information supplied by Indiana Family and Social Services Administration.

BEST COPY AVAILABLE

women and children not receiving AFDC. When all of these categories of eligible individuals are combined, however, their expenses accounted for only 32.9% of all Medicaid expenditures in Indiana in FY 1992.[8]

## Notes

1. U.S. Bureau of the Census. 1990 CPH-L-80. Selected Housing Characteristics, 1990.

2. S. P. Shelov, (ed.) *Caring for Your Baby and Young Child: Birth to Age 5*. An American Academy of Pediatrics Child Care Book (New York: Bantam Books, 1991), pp. 462-463.

3. Indiana's Childhood Lead Poisoning Prevention Program is making rapid progress in improving both the childhood lead screening processes and in data collection. Analysis equipment in the four state laboratories has been updated to use atomic absorption spectrophotometry and beginning July 1, 1993, all Indiana screening centers will be using the Center for Disease Control reporting software (STELLAR) that will bring uniformity to data collection. Childhood lead poisoning data cited in *State of the Child, II* should be considered as estimates only, since variation was introduced by differences in older laboratory analysis equipment and through earlier reporting systems. The information has been drawn from Indiana State Department of Health, *Childhood Lead Poisoning Prevention Program, Report for Fiscal Years 1990-1991*. (Indianapolis: Division of Maternal and Child Health, Public Health Services Commission, n.d. [1992]).

4. Marion County Health Department, *Report 1990/1991* (Indianapolis: Marion County Health Department, n.d. [1992]), p. 5.

5. In 1991, the Centers for Disease Control established new guidelines for lead toxicity at 10 ug/dL. The Surgeon General's national objectives for the year 2000 include the following: reducing the prevalence of blood lead levels exceeding 15 ug/dL among children ages six months through five years to .5%; reducing the prevalence of blood lead levels exceeding 25 us/dL among children ages six months through five years to zero percent; and increasing to at least 70%, the proportion of people age 18 and older who know of leaded paint in homes, dust produced by removal as the major source of lead exposure for children, and that homes should be tested for leaded paint. Indiana State Department of Health, *Childhood Lead Poisoning Prevention Program*, pp. 3, 42.

6. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1993 (Washington, DC*: Center for the Study of Social Policy, 1993), p. 62.

7. This figure describing Medicaid eligibility was prepared by the Indiana Youth Institute from information about Medicaid in FY 1992 from the Indiana Division of Family and Children, Indiana Family and Social Services Administration.

8. Division of Family and Children, Indiana Family and Social Services Administration, *Annual Report, Fiscal Year 1992* (Indianapolis: Indiana Family and Social Services Administration, [1993]), pp. 9, 119, 129.

## Building Self-Acceptance

Indiana's children and youth will perceive themselves as lovable, and capable; they will act with self-confidence, self-reliance, self-direction, and control. They will take pride in their accomplishments. As they develop self-esteem, they will have positive feelings about their own uniqueness as well as that of others.

Indiana Youth Institute
from *10 Blueprints for Healthy Development*

*In 1989, there were 11,990 births to teens younger than age 20; adolescents between 10 and 14 gave birth to 210 infants. Nearly one in 10 seniors responding to the Indiana Student Health Survey reported having been pregnant or getting someone pregnant.*

BEST COPY AVAILABLE

# *Highlights*

*Sexually active Hoosier students are irregular in their use of any form of birth control, including condoms, that might also help prevent the spread of sexually transmitted diseases.*

*Sexually transmitted disease rates in Indiana are lower than for the nation as a whole, but are rising steadily. Adolescents and young adults account for more than two-thirds of the reported cases of gonorrhea, one-fourth of the syphilis cases, and well over three-fourths of the chlamydia cases.*

*Rates of HIV/AIDS cases are also lower in Indiana than for the nation, but Indiana rates are growing. Although the number of diagnoses among Hoosier young people younger than age 20 has been low, most diagnoses of HIV infection are made among 20- to 29-year-olds. Because of the long incubation period before persons seek diagnosis, health officials believe that the actual rates of infection among teens are much higher than the figures would suggest.*

*Slightly fewer young Hoosiers than their peers throughout the nation report experimenting with alcohol. Higher proportions of young Hoosiers, however, reported drinking daily and binge drinking (five or more drinks on one occasion).*

# High-Risk Behavior Introduction

Adolescence is a time when young people begin to assume responsibility for their own well-being. In today's complex world, they have readily available an array of options both for promoting health and fitness and for self-destruction, options that their elders barely knew about. Too often, the choices young people make impede their healthy development, obstruct their chances for productive adulthood, and undermine the social and economic fabrics of their communities.

Helping children learn to make responsible decisions and to act prudently is complicated by difficult conditions in today's society: changing sexual norms, wide availability of low-cost illegal drugs and lethal weapons, rising levels of poverty and violence in many families and neighborhoods, and increases in the amount of time young people are away from adult supervision. By the time children reach early adolescence, the difficulty of keeping risk-taking within safe and appropriate bounds is compounded by such normal developmental factors as maturing sexuality, expanding circles of friends and acquaintances, increased physical strength and endurance, and a sense of personal invulnerability. Like their peers throughout the nation, young Hoosiers are involved in high-risk behaviors. These include engaging in sexual intercourse that may result in pregnancy and/or transmission of disease, using alcohol, tobacco, and other drugs, and driving recklessly or under the influence of alcohol or other drugs. A distressing number take the greatest risks of all, homicide and suicide. The discussion that follows, based on the best data available, examines each of these high-risk behaviors.

At various points throughout this chapter, reference will be made to findings from the **Indiana Student Health Survey**, conducted late in 1991 by the state's Department of Education in 25 schools among 2,037 ninth- and 12th-graders. This study closely replicated the school-based Youth Risk Behavior Survey conducted nationally by the Centers for Disease Control in 1990. Both investigations included sexual behaviors; tobacco, alcohol, and other drug use; intentional and unintentional injuries; other physical and social health variables. The 1991 Indiana study will provide baseline data for understanding and monitoring the onset and prevalence of behaviors that most affect health. The study also permits comparisons of state and national findings. Ultimately, the knowledge gained from this first survey and the periodic surveys to be conducted in the future will improve monitoring systems and educational approaches designed to reduce health-risk behaviors among young Hoosiers.

## Data Sources

The three chapters that follow contain information from many sources. Limitations of the data are discussed within the text. Information about adolescent sexuality, pregnancy, and sexually transmitted diseases was drawn from an extensive study of the health of the nation's adolescents conducted by the Office of Technology Assessment (OTA) for the U. S. Congress. The Indiana State Department of Health, the Indiana Department of Education Student Health Survey, and Planned Parenthood of Central Indiana provided figures for Indiana teens.

Information about the use of alcohol, tobacco, and other drugs came from the Indiana Student Health Survey and additional student surveys conducted by the Indiana Prevention Resource Center and Project I-STAR, as well as from a study by the United Way/Community Service Council of Central Indiana. Indiana data were compared with findings from the *National Household Survey on Drug Use* conducted by the National Institute on Drug Abuse and with recent findings of the annual University of Michigan study, *Monitoring the Future*.

Statistics on deaths and injuries were supplied by the Indiana State Department of Health and the Indiana Department of Transportation. The Indiana Student Health Survey and Project I-Star Survey provided additional insights on risk-taking behavior among Hoosier teens. National data came from the National Committee for Injury Prevention and

Control, the OTA study of adolescent health, Northwestern National Life, and the Insurance Institute for Highway Safety.

## Challenges

- Gathering information in such a way that the linkages among high-risk behavior and the need for social, health, mental health, and educational services can be assessed.
- Linking socioeconomic data with risk-behavior data.
- Gathering on-going data in Indiana that are comparable to national data.
- Making risk-behavior data available at county- and local community-levels where planning for service delivery most frequently takes place.
- Obtaining better information on the impact of prevention services and programs that promote positive youth development.

Chapter 11

# Adolescent Sexuality

## Sexual Activity

The National Survey of Family Growth, conducted over a period of several years, has found more females becoming sexually active at younger ages. The proportion of 15- to 19-year old females reporting premarital sexual activity increased from 29% in 1970, to 42% in 1980 to 51% in 1988. The increase was greatest among 15-year-olds, rising from just under 5% in 1970 to 26% in 1988. Comparable time-series data are not available for adolescent males. However, the National Survey of Adolescent Males conducted in 1988 found that 64% reported being sexually active—33% of them by age 15.[1]

**_Many American adolescents are maturing physically and becoming both fertile and sexually active before they have matured cognitively and have the capacity for long-range planning or for calculating relevant odds for the outcomes of behavior._**

Many American adolescents are maturing physically and becoming both fertile and sexually active before they have matured cognitively and have the capacity for long-range planning or for calculating relevant odds for the outcomes of behavior. All available data suggest that current national trends are likely to continue, at least into the near future. There is no reason to believe that behavior among Hoosier adolescents is different from that of their age-mates elsewhere in the nation. The Indiana Student Health Survey found that:

- 36% of 9th-graders (41% of the males vs. 31% of the females) and 68% of 12th-graders (70% of the males vs. 66% of the females) reported having sexual intercourse.
- 12% of 9th-graders and 7% of 12th-graders reported having sexual intercourse for the first time before age 13, while 32% of the 9th-graders and 23% of the 12th-graders reported having intercourse for the first time prior to age 15.

- 10% of 9th-graders (13% of the males vs. 7% of the females) and 25% of 12th-graders (26% of the males vs. 24% of the females) reported having sexual intercourse with four or more partners.
- 7% of the 9th-graders and 12% of the 12th-graders drank alcohol or used drugs before their last intercourse.[2]

## Adolescent Pregnancy

For a brief period in the mid-1980s, there was hope that teen pregnancies, rising for more than a decade, might at last be declining. By the end of the decade, however, it was clear that any celebration would be premature, for the numbers began to move upward once more. Pregnancy statistics include three outcomes: terminations, fetal deaths, and live births. Outcomes of adolescent pregnancies differ from those of older women.

In 1989 in Indiana, 15,201 young women between the ages of 10 and 19 became pregnant; 327 of them were under the age of 15. In 1989, the pregnancy *rate* for 10- to 14-year-olds was 1.7 per thousand, up slightly from 1.6 per thousand in 1988.[3] In 1989, for 15- to 19-year olds, the pregnancy rate per 1000 females was 68.2, up from 65.1 in 1988. Indiana's current teen-pregnancy rate is above the targeted rate of 58.0 per 1000 for 15- to 19-year olds declared in the State Health Plan.[4] It is well above the Healthy People 2000 objective of no more than 50 pregnancies per 1,000 adolescent girls ages 17 and younger.[5]

### Terminated pregnancies and fetal deaths

Women under age 20 experienced 16% of all pregnancies reported in Indiana in 1989. However, this age group experienced 25% of all terminated pregnancies and 16% of all fetal deaths. The youngest women were most likely to terminate pregnancies. In the six-year period from 1984 through 1989, the latest year for which figures are available, the rate of *all terminated* pregnancies per 1000 live births declined by 21%, from 185.7 per 1000 live births in 1984 to 147.1 per 1000 live births in 1989. Among adolescents, however, the decline was 29%, down from 366.7 terminations per 1000 live births in 1984 to 259.3 per 1000 live births in 1989 (Table 11.1).

**Table 11.1 Indiana Pregnancy Outcomes, 1984 - 1989**

| | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
|---|---|---|---|---|---|---|
| Total live births (all ages) | 79,883 | 80,928 | 79,269 | 78,515 | 81,414 | 83,201 |
| *Birthrate per 1000 population* | 14.5 | 14.7 | 14.4 | 14.2 | 14.7 | 15.0* |
| Terminated pregnancies (all ages) | 14,830 | 14,667 | 14,316 | 13,399 | 12,411 | 12,237 |
| *Rate per 1000 live births* | 185.7 | 181.2 | 180.6 | 170.6 | 152.4 | 147.1 |
| Total live births ages 19 and under | 11,275 | 11,399 | 11,115 | 10,782 | 11,432 | 11,990 |
| *Birthrate per 1000 females* | 25.6 | 26.5 | 26.2 | 25.4 | 27.2 | 28.9* |
| Terminated pregnancies ages 19 and under | 4,134 | 3,882 | 3,601 | 3,384 | 3,214 | 3,109 |
| *Rate per 1000 live births to women ages 10-19* | 366.7 | 340.6 | 324.0 | 313.9 | 287.8 | 259.3 |
| Reported pregnancies ages 10-14 | 379 | 391 | 367 | 340 | 325 | 327 |
| *Pregnancy rate per 1000 females ages 10-14* | 1.8 | 1.9 | 1.8 | 1.7 | 1.6 | 1.7* |
| Births to females ages 10-14 | 185 | 178 | 198 | 192 | 188 | 210 |
| *Birthrate per 1000 females ages 10-14* | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 1.1* |

* *Rate calculated using population figures from 1990 Census.*

*Source*: Indiana State Department of Health.

Available data do not reveal whether these figures reflect a greater willingness among teens and older women to carry their pregnancies to term or a decrease in the availability, accessibility, and affordability of abortion services. Indiana law requires parental consent before a woman under age 18 can terminate a pregnancy. While Michigan recently passed similar restrictions, Illinois and Kentucky have no such laws; Ohio requires parental notification only.[6] Anecdotal reports suggest that some young Hoosier women—for reasons of privacy, availability, and accessibility of services—go to neighboring states to terminate their pregnancies. The Indiana figures, therefore, may underrepresent both the numbers of pregnancies and abortions among adolescents.

## Teen births

Nationally, the teen birthrate reached a low point in 1986 and has risen each year since. In 1989, the teen birthrate was nearly 15% higher than in 1986. In 1989, teens gave birth to 517,989 infants, up from 488,941 just one year earlier. The birthrate per 1000 females under age 20 was the highest since 1974. The most recent figures (1990) for teens ages 15 to 19, show a birthrate of 59.9; for teens under age 15, the birthrate was 1.4. Adolescent pregnancy rates in the United States are the highest among all industrialized nations—in spite of similar proportions of sexually active young people in several other developed nations.

In Indiana, the low point in the teen birthrate came in 1987, when the rate was 25.4 births per 1000 females ages ten to 19 years. By 1989, the birthrate had risen to 28.9 per 1000 adolescent women.[7] For Hoosier teens ages 15 to 19, the birthrate was 54.0, while for teens under age 15, the rate was 1.1.[8] In 1990, the rate for 15- to 19-year-olds rose again, to 58.5, while for women under age 15, it remained about the same, at 1.0. In 1989, births to single adolescents represented 9.1% of all births in Indiana, compared with 8.6% of all births nationally.[9] In 1990, the proportion of all births to single Hoosier teens rose to 9.9%.[10] Of the 9th-grade respondents to the Indiana Health Survey, 3% reported having been pregnant or having gotten someone pregnant; the comparable figure for 12th-graders was 9%.[11]

# Contraceptive Use

In national studies, only about half the teens ages 15 to 19 surveyed have reported using any method of contraception at their first intercourse. Teens ages 18 to 19 are more likely to use contraception at first intercourse and to use more reliable methods than are younger teens. Among sexually active teens, on average, a year passes between first intercourse and the first use of a prescription method of birth control.[12]

The Indiana Student Health Survey provides information about contraceptive use among Hoosier teens:

- Of the sexually active students, 8% in grade 9 and 11% in grade 12 used no method of birth control the last time they had sexual intercourse.
- Of the sexually active students, only 21% of the 9th-graders and 31% of the 12th-graders used a condom the last time they had sexual intercourse.

These findings indicate that substantial proportions of sexually active Indiana teens are not regularly practicing contraception or taking precautions against sexually transmitted diseases (STDs). These data are consistent with high pregnancy rates and rising rates of STDs among Hoosier adolescents.

## Sexually Transmitted Diseases

### National trends

In addition to unplanned pregnancies, youths who are sexually active risk infections that may be of bacterial, viral, mycoplasmal, fungal, or protozoan origin. The most lethal of the sexually transmitted diseases (STDs) is caused by the Human Immunodeficiency Virus (HIV) that over a course of years nearly always progresses to full-blown AIDS infection, followed by death. In the concern over incurable HIV infection, it must be remembered that *any* STD can have very serious consequences for a young person, particularly when the infection goes undiagnosed and/or untreated.

Good national data on the incidence of many STDs are unavailable because of variations in reporting requirements among the states. However, there are national data for gonorrhea, syphilis, and, more recently, HIV/AIDS since reporting is required in all 50 states. Several patterns have emerged that suggest that the reports are undercounts of actual cases. For example, higher rates of STD infections have been reported in females than in males, and in nonwhites than whites. Differences in rates among females and males may be a consequence of routine STD screening done when sexually active females seek information about family planning. Sexually active males do not make as much use of such routine access to reproductive health services. Ethnic group differences may be related to somewhat higher sexual activity reported by African-American teens, but these group differences may also be a consequence of the relatively greater use of public health facilities by African-American and Hispanic/Latino teens. Generally, public health clinics are much more thorough in their reporting of STDs than are private practitioners.[13]

### Trends in Indiana

Indiana has some of the nation's most rigorous requirements for the reporting of STDs by health professionals; however, the figures may still represent an undercount for the reasons previously stated. In addition, some teens may not seek medical attention for STD infections out of ignorance or fear, while others may not know that they have a disease because no symptoms appear.[14] Table 11.2 presents trend data for gonorrhea, syphilis and chlamydia morbidity in Indiana between 1986 and 1991. Although the rates of these three STDs among Hoosier young people are lower than the national estimates, the trends upward reflect rising trends nationally. Both Indiana and the nation have set as a goal for the year 2000 a marked decline in sexually transmitted diseases. Progress to date is not encouraging.

***Both Indiana and the nation have set as a goal for the year 2000 a marked decline in sexually transmitted diseases. Progress to date is not encouraging.***

*Gonorrhea*. Teens between 15 and 19 years of age consistently accounted for about a third of the reported cases of gonorrhea in Indiana between 1986 and 1991. Young adults between ages 20 and 24 accounted for about another third of the cases, while 10- to 14-year olds continued to represent 2% of the cases. The low-point for reported cases in Indiana came in 1988—following two years of decline. Even though gonorrhea cases declined slightly in the two youngest age groups in 1991 compared with 1990, the number of cases in 1991 compared with the low-point in 1988 represents an increase of 39% among 10- to 14-year olds; an increase of 24% among 15- to 19-year olds; and an increase of 25% among 20- to 24-year olds (Table 11.3).

*Syphilis*. Relatively less common among Hoosier adolescents, syphilis is nevertheless a problem. The numbers of cases of syphilis have fluctuated among the two youngest age groups in the 1986 to 1991 period. However, the overall trend is upward. Comparing 1991 figures with those from the low point in 1988, there was an 86% increase in numbers of cases among 15- to 19-year olds, and a 112% increase in cases among 20- to 24-year olds. Again, the rates per 100,000 in Indiana are lower than national rates, but they are following the same upward trend.

*Chlamydia*. Collection of data on cases of chlamydia in Indiana began in 1990. In that year, the rates of chlamydia infection in all three age groups were higher than for gonorrhea. Comparable national rate estimates are unavailable, although what data there are suggest a sharply rising trend. Chlamydia is a growing problem among Hoosier young people. In just one year, between 1990 and 1991, the number of cases increased by 44% among 10- to 14-year olds, by 24% among 15- to 19-year olds, and by 38% among 20- to 24-year olds.

### Table 11.2 Morbidity of Sexually Transmitted Diseases, 1986 - 1991, Indiana

| | | 1991 | | 1990 | | 1989 | | 1988 | | 1987 | | 1986 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Age Group** | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
| **Gonorrhea** | 10 - 14 | 207 | 2* | 212 | 2 | 198 | 2 | 149 | 2 | 171 | 2 | 202 | 2 |
| | 15 - 19 | 3,805 | 33 | 3,961 | 35 | 3,757 | 34 | 3,063 | 33 | 3,333 | 33 | 4,041 | 32 |
| | 20 - 24 | 3,715 | 33 | 3,451 | 31 | 3,382 | 30 | 2,969 | 32 | 3,384 | 33 | 4,334 | 34 |
| **Total reported cases all ages** | | **11,376** | | **11,257** | | **11,090** | | **9,203** | | **10,113** | | **12,589** | |
| **Syphilis** | 10 - 14 | 0 | 0* | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 15 - 19 | 13 | 7 | 20 | 15 | 7 | 9 | 7 | 7 | 2 | 3 | 9 | 9 |
| | 20 - 24 | 34 | 18 | 32 | 24 | 19 | 24 | 16 | 24 | 20 | 26 | 30 | 29 |
| **Total reported cases all ages** | | **193** | | **133** | | **79** | | **66** | | **77** | | **104** | |
| **Chlamydia**** | 10 - 14 | 326 | 3* | 227 | 3 | | | | | | | | |
| | 15 - 19 | 4,964 | 43 | 4,000 | 45 | | | | | | | | |
| | 20 - 24 | 3,982 | 34 | 2,883 | 32 | | | | | | | | |
| **Total reported cases all ages** | | **11,649** | | **8,985** | | | | | | | | | |

*Percentage of total reported cases, all ages.

**Morbidity reporting of Chlamydia began in 1990.

*Source*: Indiana State Department of Health.

**Table 11.3 Sexually Transmitted Diseases in Indiana and United States, by Age Group**

| | | Rate per 100,000 | | % Increase in Indiana Cases, 1988-1991 |
|---|---|---|---|---|
| | | Indiana 1991 | U.S. 1989 | |
| **Gonorrhea** | | | | |
| Age | 10 - 14 | 50.9 | 69.7 | 38.9 |
| | 15 - 19 | 889.9 | 1,145.4 | 24.2 |
| | 20 - 24 | 889.5 | – | 25.1 |
| | All ages | – | – | 23.6 |
| **Syphilis** | | | | |
| Age | 10 - 14 | 0 | 1.3 | 0 |
| | 15 - 19 | 3.0 | 24.7 | 85.7 |
| | 20 - 24 | 8.1 | – | 112.5 |
| | All ages | – | – | 192.4 |
| **Chlamydia** | | | | |
| Age | 10 - 14 | 80.2 | – | 43.6* |
| | 15 - 19 | 1,160.9 | – | 24.1* |
| | 20 - 24 | 953.5 | – | 38.1* |
| | All ages | – | – | 29.6 |

*% of increase, 1990-1991 because chlamydia morbidity reporting began in 1990.

*Source*: Indiana State Department of Health.

## HIV/AIDS infection

Indiana has been collaborating with the Center for Disease Control's HIV/AIDS surveillance program since 1982. The cumulative statistics cited here and in Table 11.4 and Table 11.5 are for 1982 through March 31, 1992.[15] In this period of ten years, 1,518 Hoosiers of all ages have been diagnosed with full-blown AIDS. Of these, 937 (62%) have died. Only 32 (9%) of the individuals diagnosed with AIDS prior to 1988 were still living five or more years later. An additional 1,755 Hoosiers have been identified as carrying the Human Immunodeficiency Virus (HIV+). While the state's most populous counties report the greatest numbers of cases, only one of Indiana's 92 counties—Benton—has had no reported case of AIDS or HIV+ among residents since 1985.

Of the total numbers in Indiana, 22 AIDS cases (1.4%) and 75 HIV+ cases (4.3%) have been diagnosed in young people under the age of 20 (Table 11.4). Individuals may carry the virus for 10 years or longer before symptoms appear, however. The most common age group for HIV+ diagnosis is 20 to 29, accounting for 40% of the cases in Indiana. It is believed that many of these individuals contracted the virus as teens or later from teenage sex partners. Because the disease may remain asymptomatic for years, the numbers of diagnosed HIV+ cases among individuals under age 20 are considered to be seriously undercounted. AIDS is most commonly diagnosed in individuals who are between the ages of 30 and 39; in Indiana, 47% of the cases were diagnosed in this age group. Some of these individuals also may have contracted the virus in the late teen years.

**Table 11.4 Age at HIV+ Report, AIDS Diagnosis (Cumulative Cases through April 30, 1992)**

| | Indiana HIV+ Cases | | Indiana AIDS Cases | | United Sates AIDSCases |
|---|---|---|---|---|---|
| **Age** | **Number** | **%** | **Number** | **%** | **%** |
| 0 - 12 | 31 | 2 | 11 | <1 | 2 |
| 13 - 19 | 44 | 3 | 11 | 1 | <1 |
| 20 - 29 | 699 | 40.5 | 342 | 22.5 | 20 |
| 30 - 39 | 669 | 38.7 | 715 | 47.1 | 46 |
| 40 - 49 | 203 | 11 | 291 | 19 | 22 |
| 50 + | 81 | 5 | 148 | 10 | 10 |
| **Total** | **1,727** | **100** | **1,518** | **100** | **100** |

*Source*: Indiana State Department of Health, HIV/AIDS Surveillance.

Table 11.5 lists the risk factors that have been the source of HIV and AIDS infections among Hoosiers. Pediatric AIDS cases are those among children under the age of 13. Just under half of Indiana's pediatric AIDS cases diagnosed since 1982 have been among hemophiliacs or those who have received blood transfusions. The remaining six cases received the virus from infected mothers. Adolescent and young adult statistics are not reported separately. Among Hoosier adolescents and adults, 61% of the HIV+ cases and 73% of the AIDS cases have been diagnosed among homosexuals or bisexuals. The second highest risk factor, intravenous drug use, was involved in 17% of the HIV+ cases and 8% of the AIDS cases. Smaller proportions were both homosexual/bisexual and IV drug users (8% of HIV+ cases, and 6% of AIDS cases). One in ten Indiana cases of HIV+ involved heterosexual contact only, higher than the national average. Nationally, the proportion of individuals who have contracted HIV through heterosexual contact is growing. This trend will affect Indiana as well.

**Table 11.5 HIV/AIDS Surveillance Summary of Cumulative Cases through April 30, 1992 (United States AIDS Cases Cumulative through March 31, 1992)**

| | Indiana HIV+ | | Indiana AIDS | | U.S. AIDS | |
|---|---|---|---|---|---|---|
| **Risk Factor** | **Cases** | **%** | **Cases** | **%** | **Cases** | **%** |
| Adult and adolescent | | | | | | |
| Homosexual/bisexual | 671 | 60.6 | 1,095 | 72.7 | 124,961 | 58 |
| Injection drug user (IDU) | 191 | 17.2 | 123 | 8.2 | 48,312 | 23 |
| Homosexual & IDU | 85 | 7.7 | 86 | 5.7 | 13,823 | 6 |
| Hemophilia | 22 | 2.0 | 30 | 2.0 | 1,812 | 1 |
| Heterosexual | 111 | 10.0 | 69 | 4.6 | 12,881 | 6 |
| Transfusion | 28 | 2.5 | 56 | 3.7 | 4,537 | 2 |
| Not identified, at this time | | | 48 | 3.2 | 8,283 | 4 |
| **Total** | **1,108** | **100** | **1,507** | **100.1** | **214,609** | **100** |
| Pediatric | | | | | | |
| Hemophilia | 6 | 21.4 | 3 | 27.3 | 173 | 5 |
| Transfusion | 1 | 3.6 | 2 | 18.2 | 296 | 8 |
| Mother HIV+ or AIDS | 21 | 75.0 | 6 | 54.5 | 3,133 | 85 |
| Not identified, at this time | | | | | 90 | 2 |
| **Total** | **28** | **100** | **11** | **100** | **3,692** | **100** |

*Source*: Indiana State Department of Health, HIV/AIDS Surveillance.

Nationally, AIDS has become the 6th leading cause of death among adolescents and young adults, ages 15 to 24. Although AIDS was not among the leading causes of death in this age group in Indiana in 1989 (the latest year for which mortality data were available), the number of diagnosed cases of AIDS among all age groups in Indiana has risen each year—from six in 1982 to 311 in 1991.

## Sexuality Education

Support for including sexuality education in the school curriculum has grown steadily in recent years among Hoosier parents and educators.[16] Indiana is one of about 28 states that require HIV/AIDS education for all students in kindergarten through grade 12. Although mandated by the state, the Indiana Student Health Survey found that one in four 9th- and 12th-graders reported they had not been taught about HIV/AIDS.[17]

Students generally find sex education valuable. When the Indiana Youth Poll asked students: "What are the most important things that you are learning in school?" sex education came in third, behind mathematics and English. When the same students were asked: "What things are you learning in school that help you now, as a teenager?" sex education was far and away the most frequently mentioned course. Young people want accurate, straight-forward information from sources they deem credible, such as parents and health professionals. While it is true that the most effective means for preventing pregnancy, as well as STDs and HIV/AIDS infection, is abstinence from sexual intercourse, with each passing year, this option is rejected by more and more teens and young adults. Further, celibacy is rarely a life-long behavioral choice; sexually active individuals of all ages need information about sexual development, sexual identity, gender roles, reproductive health, family relationships, family planning, pregnancy and parenting, and related topics.

The question relative to pregnancy and STD prevention thus becomes: "For adolescents who do not abstain from intercourse, what protective options are available?" Education efforts have been aimed at getting young people to adopt "safer" practices, such as the use of effective birth control methods and the use of condoms to reduce the risk of STD and HIV infection. Evidence from pregnancy prevention programs reveals that education begun before the initiation of sexual intercourse can be effective in delaying initiation. Evidence also suggests that young people may have information but not act upon it. Or, given the current emphasis in many curriculums, students may know about preventing HIV infection but not transfer this information to other STDs. Or they may recall information soon after they have heard it (when most program evaluations are done) but forget it later on.

The U.S. Office of Technology Assessment (OTA) conducted an exhaustive survey of studies, programs, and reports; after sifting through the evidence, OTA recommended the options presented in Boxes A and B.[18]

## Box A

### Specific Options Related to Pregnancy and Parenting

**Option 1:** Improve adolescents' access to health and related services.

*Services for pregnancy prevention:*

- Support efforts to make contraception (and information about using contraception effectively—also see Federal research options) readily available to sexually active adolescents.
- Support the provision of comprehensive services (i.e., mental health, social, educational, vocational services) to pregnant and parenting adolescents.

*Services for adolescents who are pregnant:*

- Support outreach to ensure that pregnant adolescents who choose to give birth remain in school and obtain prenatal care. Support a range of intensive services for pregnant adolescents who choose to bear children (including prenatal care, housing, nutritional support, education, counseling).
- Eliminate the loophole in the Pregnancy Discrimination Act of 1978, which currently does not require that dependents other than spouses be covered for prenatal care.
- Support equal opportunity to abortion services, including a greater range of alternatives to parental notification and permission.

*Services for adolescents who are parents:*

- Support the availability of a range of intensive services for adolescent parents and their children, and of adequate assistance to manage adolescents' access to such services; such services include housing, food, transportation, child care, academics, and parenting education and assistance.

**Box A cont.**

*Health education:*

- Support the provision to adolescents of information relevant to obtaining access to contraceptive and other services that could protect them against pregnancy.
- Support pregnancy prevention education for young adolescents, before they are likely to become sexually active. Support implementation (with accompanying rigorous evaluation) of broad-based, intensive programs such as life-options training and work experience programs which are combined with participatory discussions of responsible sexuality, and the provision of contraception. Such innovative efforts would require more intensive, and perhaps different, training of family life educators.
- Support the implementation (with accompanying rigorous evaluation) of parent-child communication groups with a focus on sexuality.
- Support targeting of pregnancy prevention education efforts to black and poor adolescents.

**Option 2:** Support Federal data collection and research.

*Data collection:*

- Support routine collection of data on adolescent sexual activity and birth-related outcomes.
- Support routine collection of data on sexual activity, pregnancies, and pregnancy outcomes among racial and ethnic minority adolescents.
- Support routine collection of socioeconomic status data on adolescents who are sexually active, become pregnant, have abortions, and become parents.

*Research:*

- Support research on the factors that lead adolescents to engage in unprotected sexual intercourse.
- Support research on contraceptive technology, with an emphasis on technology that is appropriate for and acceptable for adolescents.
- Support efforts to determine how to incorporate adolescents' views in the design and evaluations of prevention efforts.
- Support research on why pregnant adolescents do not more frequently choose adoption as an option.
- Support research on why efforts to provide a comprehensive range of services to adolescent parents through case management and referral have found that *brokering* such services is difficult.

*Source:* Office of Technology Assessment, 1991.

## Box B

### Specific Options Related to AIDS/HIV Infection and Other Sexually Transmitted Diseases

**Option 1:** Improve adolescents' access to health and related services.

- Encourage school districts to make condoms and condom-related education easily available to the adolescents who are most likely to be sexually active (e.g., older adolescents).
- Support active and flexible approaches to the provision of treatment for STDs to encourage adolescents to seek treatment and return for follow-up care.
- Target AIDS/HIV prevention (e.g., condom distribution) and education efforts to adolescents living on their own.
- Support outreach efforts to bring adolescents who are not in contact with the mainstream health care system into clinical trials for AIDS drugs.

*Health education:*

- Support the provision of information to adolescents on the prevention and treatment of AIDS *and* STDs.
- Support the provision to adolescents of information relevant to obtaining access to services for the prevention and treatment of AIDS and STDs.
- Support training and dissemination of information on the specific needs of adolescents for health care workers in STD clinics.
- Support the dissemination of prevention and education efforts into nonmetropolitan areas, to younger adolescents, to adolescents who are intravenous drug users, and to homosexual or bisexual adolescents.

**Option 2:** Support Federal data collection and research.

*Data collection:*

- Mandate confidential reporting of a broader spectrum of STDs.
- Encourage states to collect and report additional demographic data on those with STDs (e.g., smaller age breaks, socioeconomic status, and race and ethnicity).
- Support the regular collection of population-based information on STDs, including HIV, among adolescents.

*Research:*

- Support research to assess the need for adolescent-specific guidelines for the treatment of STDs and AIDS. Support research into therapeutic regimens that are likely to increase adolescent compliance (e.g., single-dose regimens).

*Source*: Office of Technology Assessment, 1991.

## Notes

1. U.S. Congress, Office of Technology Assessment, *Adolescent Health—Volume II: Background and the Effectiveness of Selected Prevention and Treatment Services*, OTA-H-466 (Washington, DC: U.S. Government Printing Office, November 1991), p. 326.

2. N. T. Ellis and M. R. Torabi, *The Indiana Student Health Survey* (Indianapolis: The Indiana Department of Education, 1992).

3. Data supplied by Indiana State Department of Health.

4. Indiana State Department of Health, *Healthy Hoosiers 2000*.

5. Indiana State Department of Health, Maternal and Child Health Division, *Annual report: Fiscal Year 1991* (Indianapolis: Indiana State Department of Health, July 1992), p. 58.

6. P. Donovan, *Our Daughters' Decisions: The Conflict in State Law on Abortion and Other Issues* (New York: The Alan Guttmacher Institute, 1992).

7. Rate calculated using 1990 census figures.

8. Indiana State Department of Health, Public Health Statistics, 1992.

9. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1992* (Washington, DC: Center for the Study of Social Policy, 1992), p. 51.

10. Annie E. Casey Foundation and Center for the Study of Social Policy, *KIDS COUNT Data Book, 1993* (Washington, DC: Center for the Study of Social Policy, 1993), p. 63.

11. Ellis and Torabi, *The Indiana Student Health Survey*.

12. W. F. Pratt, *et al.*, National Survey of Family Growth, 1982, Cycle III. National Center for Health Statistics, 1984; C. D. Hayes, *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing*, 1987. Cited in "Adolescent Contraception," Topic Brief from Planned Parenthood of Central Indiana, Inc., 1990.

13. U.S. Congress, Office of Technology Assessment, *Adolescent Health—Volume II: Background and the Effectiveness of Selected Prevention and Treatment Services*, OTA-H-466 (Washington, DC: U.S. Government Printing Office, November 1991).

14. U.S. Congress, Office of Technology Assessment, *Adolescent Health—Volume II: Background and the Effectiveness of Selected Prevention and Treatment Services*, OTA-H-466.

15. Indiana State Department of Health, HIV/AIDS Surveillance, Monthly Summary Report, April 1, 1992.

16. N.a. "Sexuality Education," Topic Brief, Planned Parenthood of Central Indiana, Inc., 1992.

17. Ellis and Torabi, *The Indiana Student Health Survey*.

18. U.S. Congress, Office of Technology Assessment, *Adolescent Health—Volume I: Summary and Policy Options*, OTA-H-468 (Washington, DC: U.S. Government Printing Office, April 1991), pp. 94, 98.

Chapter 12

# Alcohol, Tobacco, and Other Drugs

## Sources of Information

### Understanding national trends

Recent national data on the use of alcohol, tobacco, and other drugs by American young people come from two primary sources:

(1) *National Household Survey on Drug Abuse* (NHS), sponsored by the National Institute on Drug Abuse (NIDA), was conducted between March and June of 1990. Findings are based on a sample of 9,259 interviews stratified to ensure appropriate representation of four age groups (12 to 17, 18 to 25, 26 to 34, and 35+) and three ethnic groups (white, Hispanic, and African-American). Although this sample includes school drop-outs, the aggregate category reported, 12- to 17-year-olds, is too broad to be truly useful. The 12 to 17 age group from this study provides national data roughly comparable to aggregated data from Hoosier youths in grades 5 through 11.

(2) *Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth* (MTF) was conducted by the University of Michigan's Institute for Social Research. Also funded by the National Institute on Drug Abuse, this research among high-school seniors has been ongoing since 1975. The Class of 1991 study included 8th- and 10th-graders for the first time. This study has also included followup surveys of earlier participants who now range from recent high-school graduates through age 32. This study is an important source of national trend data, but it is limited to in-school youth. Nationally, about one-fourth of all high-

school students drop out prior to graduation; their substance use patterns may be quite different from those of students who remain in school. Comparisons from this study will be used in discussing 8th, 10th, and 12th grade students in Indiana schools.

Both national studies are detailed and comprehensive. For each drug category, this chapter summarizes only major findings and compares them with Indiana data.[1]

### Understanding trends in Indiana

For the first time, statewide data are available on cigarette, alcohol, and other drug use among Indiana's young people. More than 23,000 students in grades 5 through 12 in 48 Indiana school corporations participated in a 1991 survey conducted by the Indiana Prevention Resource Center (IPRC). This survey was repeated in 1992 among 20,629 students through 53 surveys conducted in 88 different schools throughout Indiana.[2] Information from this study is supplemented by findings from three other sources: on-going research conducted in Marion County by the Indiana Students Taught Awareness and Resistance Project (I-STAR);[3] a research summary for central Indiana counties carried out by the United Way/Community Service Council of Central Indiana;[4] and the Indiana Student Health Survey (ISHS)[5].

Both encouraging similarities and some disturbing differences in alcohol and other drug use patterns show up among Hoosier young people and their peers in the rest of the nation. Tables 12.1 and 12.2, drawn from the Indiana Prevention Resource Center study report, summarize comparative information about the percentage of students who have already used alcohol or another drug *at some time during their lives* (this is referred to as *lifetime prevalence*).

## Alcohol

### Alcohol purchase

Before minors can drink beverage alcohol, they must acquire it. For most young people, this presents little difficulty. Many have only to raid household stocks, while others have established conduits via older friends.

Some, however, have to resort to direct purchase, an illegal act on the parts of both buyer and seller. A recent traffic-safety grant has allowed Indiana, for the first time, to compile data on sales of alcohol to minors. As of January 1992, there were 9,436 establishments in the state with permits to sell beverage alcohol. This number includes a wide variety of sales sites—corner drug stores, liquor stores, lodge halls, hotels, bars, and restaurants. Of these licensed establishments, 816 (nearly 9%) were cited in 1991 for 1,823 violations, a majority involving minors.

Also in 1991, charges were upheld against 3,802 minors for such acts as possession of false identification, purchasing or attempting to purchase alcohol, public intoxication, or other drug-related activities. These young people had their drivers' licenses suspended and paid fines that totalled $336,485. To acquaint students with the nature of the laws involving alcohol and the legal consequences of violation, the Traffic Safety Department is launching more intensive educational programs in the schools.[6]

**Table 12.1 Lifetime Prevalence of Alcohol and Other Drug Use Among Indiana High-School Seniors, 1991 - 1992, with National Comparisons**

| Drug | Indiana[a] (%) | National[b] (%) | Indiana[c] (%) | National[d] (%) |
|---|---|---|---|---|
| Smokeless tobacco | 38.0 | - | 39.5 | - |
| Cigarettes | 69.1 | 64.4 | 69.4 | 63.1 |
| Alcohol | 88.1 | 89.5 | 87.0 | 88.0 |
| Marijuana | 34.2 | 40.7 | 31.0 | 36.7 |
| Cocaine | 6.9 | 9.4 | 6.0 | 7.8 |
| Crack | 1.9 | 3.5 | 3.4 | 3.1 |
| Inhalants | 14.6 | 18.0 | 14.8 | 17.6 |
| Amphetamines | 22.1 | 17.5 | 19.1 | 15.4 |
| Tranquilizers | 13.5 | 7.2 | 14.6 | 7.2 |
| Narcotics | 12.0 | 8.3 | 10.1 | 6.6 |
| Psychedelics | 9.8 | 9.4 | 11.2 | 9.6 |
| Heroin | 1.4 | 1.3 | 2.4 | 0.9 |
| Steroids | 2.3 | 2.9 | 3.6 | 2.1 |

*Notes:* [a] Indiana: IPRC data, 1991.
[b] National Survey of High-School Seniors (MTF), Class of 1990.
[c] Indiana: IPRC data, 1992.
[d] National Survey of High-School Seniors (MTF), Class of 1991 (mimeograph).

*Source:* Indiana Prevention Resource Center.

## Alcohol consumption

*National Trends*. Alcohol is the most widely used of all drugs.

- Only one in ten members of the class of 1990 had never used alcohol in his or her lifetime. Of the 89% who had tried alcohol, nine in ten used it during their senior year. More than half (57%) of high school seniors had used alcohol in the past month, *i.e.* were *current* users (*Monitoring the Future* [MTF], Class of 1990).

**Table 12.2 Lifetime Prevalence of Alcohol and Other Drug Use Among Indiana Students Grades 5-11, 1991 - 1992**

| National[a] | | | Indiana | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 - 17 Year Olds (%) | Drug | Year | 5th (%) | 6th (%) | 7th (%) | 8th (%) | 9th (%) | 10th (%) | 11th (%) |
| 11.8 | Smokeless tobacco | 1991[b] | 8.7 | 9.2 | 17.4 | 24.8 | 28.0 | 35.5 | 35.1 |
| | | 1992[c] | 8.8 | 13.0 | 16.2 | 26.6 | 28.5 | 32.0 | 37.3 |
| 40.2 | Cigarettes | 1991 | 22.5 | 32.2 | 43.0 | 52.1 | 54.2 | 61.6 | 63.0 |
| | | 1992 | 21.3 | 33.2 | 42.7 | 55.0 | 58.2 | 62.6 | 65.5 |
| 48.2 | Alcohol | 1991 | 33.1 | 40.4 | 56.3 | 64.7 | 74.6 | 81.4 | 83.5 |
| | | 1992 | 33.5 | 37.4 | 48.0 | 66.1 | 72.8 | 78.7 | 82.9 |
| 14.8 | Marijuana | 1991 | 1.0 | 1.8 | 5.2 | 11.7 | 15.9 | 26.2 | 29.4 |
| | | 1992 | 1.1 | 2.9 | 5.6 | 12.2 | 16.6 | 22.4 | 28.5 |
| 2.6 | Cocaine | 1991 | **[d] | ** | 1.3 | 2.2 | 2.5 | 5.3 | 6.0 |
| | | 1992 | ** | ** | 1.1 | 2.4 | 3.2 | 3.9 | 5.2 |
| 1.0 | Crack | 1991 | ** | ** | 1.1 | 2.1 | 1.2 | 3.1 | 2.4 |
| | | 1992 | ** | ** | ** | 1.6 | 1.8 | 2.1 | 2.4 |
| 7.8 | Inhalants | 1991 | 6.6 | 9.6 | 10.9 | 13.7 | 12.3 | 16.7 | 14.5 |
| | | 1992 | 7.4 | 8.2 | 9.4 | 16.7 | 14.1 | 13.5 | 16.1 |
| 4.5 | Amphetamines | 1991 | ** | 1.2 | 5.0 | 9.7 | 12.9 | 20.0 | 22.3 |
| | | 1992 | 1.1 | 1.5 | 4.8 | 11.4 | 13.9 | 17.1 | 20.4 |
| 2.7 | Tranquilizers | 1991 | 2.9 | 3.4 | 6.9 | 9.0 | 9.2 | 13.3 | 12.8 |
| | | 1992 | 3.9 | 4.8 | 6.8 | 13.0 | 11.4 | 14.1 | 15.1 |
| 6.5 | Narcotics | 1991 | 1.7 | 2.1 | 4.4 | 5.9 | 6.9 | 10.0 | 11.3 |
| | | 1992 | 1.5 | 2.0 | 3.4 | 7.0 | 6.8 | 9.4 | 11.3 |
| 3.3 | Psychedelics | 1991 | ** | ** | 1.5 | 3.3 | 3.6 | 7.7 | 8.7 |
| | | 1992 | ** | 1.3 | 2.3 | 4.3 | 5.6 | 8.0 | 10.4 |
| ** | Heroin | 1991 | ** | ** | ** | 1.7 | 1.0 | 2.0 | 2.1 |
| | | 1992 | ** | ** | 1.0 | 1.6 | 2.0 | 1.9 | 1.9 |
| NC | Steroids | 1991 | 1.2 | 1.2 | 2.2 | 2.9 | 2.2 | 3.0 | 2.9 |
| | | 1992 | 1.6 | 2.2 | 2.4 | 3.1 | 2.7 | 3.0 | 3.1 |

*Notes:* [a] National Household Survey on Drug Abuse, 1990.
[b] IPRC Survey, 1991.
[c] IPRC Survey, 1992.
[d] **=Less than 1.0 percent.

*Source:* Indiana Prevention Resource Center.

- While the use of most other substances, including cigarettes, tends to decline as the educational level of students' parents rises, the reverse is true of alcohol at all prevalence levels. Among students whose parents had an 8th-grade education or less, 47% had used alcohol in the past 30 days; among offspring of college graduates or higher educational attainment, 61% had used alcohol in the past 30 days (MTF, 1990).
- Among those age 18 and over, likelihood of any use of alcohol increased with their own educational levels; however, *heavy* drinking declined with an increase in educational attainment (National Household Survey [NHS]).
- The overall trend in annual, monthly, and daily prevalence of alcohol use between 1979 and 1990 has been slowly downward. The prevalence of binge drinking had risen to 41% in 1979, but was 32% in 1990. Still, nearly one in three high-school seniors reported having five or more drinks in a row in the two weeks prior to the survey (MTF, 1990).
- For most seniors (60%), initial use of alcohol came prior to high school, with another 29% having a first drink in high school. Forty percent said they had been drunk prior to 10th grade. A surprising 28% of the seniors reported that most or all of their friends got drunk at least weekly. This is consistent with reports of their own binge drinking (MTF, 1990).
- Annual usage rates were highest among both white male (88%) and female (89%) students, and lowest among Asian-Americans. Annual usage among African-American males (72%) and females (64%) was substantially lower. Native American and Hispanic seniors also reported higher rates than African-Americans, but rates still below those of whites (MTF).
- There are substantial gender differences (39% for males and 24% for females in 1990) in reported occasions of heavy drinking (five or more drinks in a row) among high-school seniors. However the gap has been gradually narrowing since 1975 (MTF).
- Although college-bound high-school seniors are less likely to report occasions of heavy drinking than the non-college-bound, once they enter college, students appear to "catch up" and pass their non-college peers in occasions of heavy drinking. College students drink less on a daily basis but do more binge drinking—undoubtedly on the weekends (MTF, 1990).

*Trends in Indiana.* The Indiana Prevention Resource Center surveys (1991 and 1992) have found little difference among Hoosier seniors' lifetime use of alcohol and that of the national sample (Tables 12.1 and 12.2). In 1992, nearly nine in ten (87%) of Indiana's high-school seniors reported having used alcohol at some point in their lives. The 1992 study found alcohol use in the year prior to the survey (*i.e.*, *annual* prevalence) was 79% among Indiana's seniors, compared with 78% nationally, while *monthly* prevalence figures were 56% and 54%, respectively.

Where Hoosier students differed, however, was in the prevalence of daily and binge drinking (five or more drinks in a row within a couple of hours). In 1991, nearly twice as many Hoosiers (7% versus 4% nationally) reported using alcohol daily, while 39% (versus 30% nationally) reported binge drinking (Tables 12.3 and 12.4). In 1991, nearly one in fourteen (7%) Hoosier 5th-graders reported binge drinking (9% of the males and 5% of the females). By grade 10, the overall proportion had reached 31%, and increased slightly each year thereafter to 39% among seniors (47% of the senior males and 29% of the females). Similar patterns were found in the responses to the 1992 IPRC study and the Indiana Student Health Survey. In the latter study, binge drinking was reported by 42% of the senior males and 28% of the senior females. One in four of both 9th-grade males and females responding to the Student Health Survey reported binge drinking, again very similar to the findings of the IPRC studies.

**Table 12.3 Regular Alcohol Use Among High-School Seniors**

| | National (MTF) | | Indiana (IPRC) | |
|---|---|---|---|---|
| | 1990 (%) | 1991 (%) | 1991 (%) | 1992 (%) |
| Any daily drinking | 3.7 | 3.6 | 7.1 | 6.2 |
| Binge drinking | 32.2 | 29.8 | 38.7 | 37.6 |

*Source*: Indiana Prevention Resource Center.

Although lifetime usage of alcohol was essentially the same among male (88%) and female (88%) Hoosier seniors, annual and monthly usage was higher among males, particularly in the lower grades. Male respondents in both the Indiana Prevention Resource Center and the Indiana Student Health Surveys were also more likely to have initiated use of alcohol at younger ages.

Consistent with national data, the I-STAR surveys revealed lower current use of alcohol (in the past month) among nonwhite students in grades 10 and 12 than among white students (Table 12.5).

**Table 12.4 Regular Alcohol Use Among Students in Grades 5-11**

| | Any Daily Use | | | Binge Drinking[a] | | |
|---|---|---|---|---|---|---|
| | Indiana | | National | Indiana | | National |
| | 1991[b] (%) | 1992[c] (%) | 1991[d] (%) | 1991 (%) | 1992 (%) | 1991 (%) |
| Indiana (IPRC) Grade: | | | | | | |
| 5 | **[e] | ** | NC[f] | 7.1 | 5.6 | NC |
| 6 | ** | ** | NC | 9.6 | 9.4 | NC |
| 7 | 1.8 | 1.2 | NC | 14.3 | 13.5 | NC |
| 8 | 2.5 | 2.8 | 0.5 | 19.2 | 20.6 | 12.9 |
| 9 | 3.9 | 3.5 | NC | 25.1 | 24.8 | NC |
| 10 | 5.2 | 4.4 | 1.3 | 30.6 | 29.2 | 22.9 |
| 11 | 5.8 | 5.4 | NC | 34.1 | 31.7 | NC |

*Notes:* [a]Binge drinking in these studies was defined as having five or more drinks on at least one occasion in the two weeks prior to the study.
[b]IPRC Survey, 1991.
[c]IPRC Survey, 1992.
[d]National Survey of High-School Seniors (MTF), 1991.
[e]**=Less than 1.0 percent.
[f]NC denotes data were not collected.

*Source:* Indiana Prevention Resource Center.

# Tobacco

As medical evidence of the adverse health effects attributable to smoking and chewing tobacco continues to mount, concern about adolescents' use of tobacco grows.

## Cigarettes

Adolescent cigarette smoking remains stubbornly high. In a press release announcing the findings of the study of the Class of 1991 *Monitoring the Future*, psychologist Lloyd Johnston noted that 28% of all seniors reported smoking in the past month, down only 1% since 1981, and further, that nearly one in five seniors (18%) reported smoking daily—a decline of less than 2% from 1981. Johnston stated:

**Table 12.5 Current Use of Alcohol by Marion County Students by Grade, Ethnicity and Year of Survey**

| | Year of Survey | | |
|---|---|---|---|
| | 1987 (%) | 1988 (%) | 1990 (%) |
| Grade 10 | | | |
| White | 35 | 36 | 33 |
| Nonwhite | 11 | 13 | 15 |
| Grade 12 | | | |
| White | 50 | 51 | 47 |
| Nonwhite | 20 | 22 | 25 |

*Note:* "Current" means used in 30 days prior to survey.

*Source:* I-STAR.

> Considering the growing disapproval of smoking in society at large, the number of restrictions that have been enacted in recent years, and the decline in nearly all other forms of drug use, the fact that smoking is not declining is really very surprising—an anomaly. . . . Considering what we know about the deadly health consequences of smoking, the number of young people who still begin the habit is shockingly high. . . . We can predict with a fair degree of certainty that hundreds of thousands of youngsters in this year's graduating class are going to die as a result of a long-term pattern of use of this drug which they began in childhood or adolescence. . . . It is a tragedy beyond comprehension, yet in the main it is met with silence.[7]

*National Trends*. Since 1975, cigarettes have been the class of drugs most frequently used on a daily basis by high-school students. Evidence suggests other discouraging trends:

- Daily smoking rates dropped significantly between 1977 and 1981, but rates have changed little since that time (*Monitoring the Future* [MTF]).
- Initiation of daily smoking occurs most often in grades 6 through 9. Although there is relatively little initiation after high school, many who were light smokers in high school became heavy smokers in the first two years following high school (MTF).
- Of the students who were half-pack-a-day (or more) smokers among the high-school class of 1986, nearly three-fourths were daily smokers seven to nine years later. As seniors, only 5% had said they thought they would "definitely" be smoking 5 years hence. Some 53% of this group however, said that they had tried to quit and found they could not (MTF).
- In the 12 to 17 and 18 to 25 age groups, white respondents were more likely than either African-American or Hispanic/Latino respondents to report having ever smoked cigarettes, having smoked in the past year or in the past month (*National Household Survey* [NHS]).
- Males in these age groups were more likely than females to report having smoked cigarettes in their lifetimes, the past year, and the past month (NHS). Females were slightly more likely to be daily smokers among college students and high-school seniors (MTF).
- Current cigarette users were substantially more likely than those who did not smoke in the past month to

have used alcohol and a variety of illicit drugs in the past month. The relationships were especially strong for 12- to 17-year-olds, among whom 38% of the smokers had used one or more illicit drugs in the past month, compared with 4% of those who were not current cigarette smokers (NHS).

*Trends in Indiana*. Nearly seven in ten (69%) Hoosier high-school seniors have smoked cigarettes at some point in their lives, according to the Indiana Prevention Resource Center study (1992). These figures are higher than the national average of 63% (MTF, 1991). Lifetime prevalence among the 12- to 17-year-olds participating in the National Household Survey was 40%. Both the national and Indiana studies found usage to increase with age (Table 12.6). At all ages, however, young Hoosiers were more likely to have tried smoking and to be current smokers (smoked in past month). Hoosier youths who are regular smokers also exceed national averages (Tables 12.7 and 12.8). The IPRC (1991) study found that among Hoosier high-school smokers, initiation most commonly occurred between the ages of 12 and 15 years; however 21% of the seniors reported starting to smoke between ages 16 and 17.

**Table 12.6 Percentage Reporting Lifetime and Current Prevalence of Cigarette Use**

| | % Ever Used in Lifetime | | % Used in Past Month | |
|---|---|---|---|---|
| **Grade** | **Indiana 1992**[a] | **National 1991**[b] | **Indiana 1992** | **National 1991** |
| 5 | 21.3 | NC[c] | 5.5 | NC |
| 6 | 33.2 | NC | 12.9 | NC |
| 7 | 42.7 | NC | 16.9 | NC |
| 8 | 55.0 | 44.0 | 24.8 | 14.3 |
| 9 | 58.2 | NC | 28.4 | NC |
| 10 | 62.6 | 55.1 | 31.3 | 20.8 |
| 11 | 65.5 | NC | 34.9 | NC |
| 12 | 69.4 | 63.1 | 36.2 | 28.3 |

*Notes*: [a]IPRC Survey, 1992.
[b]National Survey of High-School Seniors (MTF), 1991.
[c]NC denotes data were not collected.

*Source*: Indiana Prevention Resource Center.

The Indiana Student Health Survey also found the rate of smoking among young Hoosiers to be higher than national estimates:

- 66% of the 9th-graders and 76% of the 12th-graders had tried cigarettes at some time in their lives.
- 35% of the 9th-graders and 27% of the 12th-graders smoked a whole cigarette for the first time prior to age 13; 13% of the 9th-graders and 6% of the 12th-graders started smoking cigarettes regularly (at least one cigarette per day for 30 days) prior to age 13.[8]

Both the IPRC and the Indiana Student Health Survey found more male than female smokers in all grades studied and at all levels of cigarette use. Consistent with the Monitoring the Future surveys, I-STAR studies of Marion County students have found somewhat higher rates of smoking among Hoosier females than males.

**Table 12.7 Regular Tobacco Use Among 8th-Graders and High-School Seniors, Indiana and National Comparisons**

| | National (MTF) | | | Indiana (IPRC) | | | |
|---|---|---|---|---|---|---|---|
| | | 1991[b] | | 1991[c] | | 1992[d] | |
| | 1990[a] % | Grade 8 (%) | Grade 12 (%) | Grade 8 (%) | Grade 12 (%) | Grade 8 (%) | Grade 12 (%) |
| Cigarettes | | | | | | | |
| Any daily use | 19.1 | 7.2 | 18.5 | 13.2 | 22.7 | 13.7 | 22.8 |
| 1/2 pack or more daily | 11.3 | 3.1 | 10.7 | 7.7 | 16.3 | 9.4 | 16.0 |
| Smokeless tobacco daily | | | | 4.6 | 9.6 | 5.1 | 10.4 |

*Notes*: [a]National Survey of High-School Seniors (MTF), 1990 (12th grade only).
[b]National Survey of High-School Seniors (MTF), 1991.
[c]IPRC Survey, 1991.
[d]IPRC Survey, 1992.

*Source*: Indiana Prevention Resource Center.

Because of the size of the sample, the number of young people of color was not large enough to report data separately by race/ethnic group. However, nonwhite youths are represented in the I-STAR samples of Marion County students in grades 10 and 12. I-STAR studies have found consistently, that white students are about three times as likely to have smoked in the past month as nonwhite students (Table 12.9).

## Smokeless tobacco

Long-term trend data similar to those for young people's use of cigarettes are not available for their use of smokeless tobacco. The MTF study has not asked for this information. The NHS study of 1990 found an average of 4% of 12- to 17-year-olds had used smokeless tobacco in the past month. The Indiana Prevention Resource Center study found monthly prevalence among Indiana youths in 1992 was considerably higher, running from 4% among 5th-graders to 19% among 11th-graders,

## Table 12.8 Percent Regular Tobacco Use Among Students in Grades 5 - 11

| | | Cigarettes | | | | | | Smokeless Tobacco | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Any Daily Use | | | 1/2 Pack or More Daily | | | Used in Past Month | | Daily | |
| | | Indiana | | National | Indiana | | National | Indiana | | Indiana | |
| **Indiana (IPRC)** | | 1991[a] (%) | 1992[b] (%) | 1991[c] (%) | 1991 (%) | 1992 (%) | 1991 (%) | 1991 (%) | 1992 (%) | 1991 (%) | 1992 (%) |
| Grade | 5 | 2.4 | 2.2 | NC[e] | 1.1 | 1.2 | NC | 4.1 | 3.9 | **[d] | ** |
| | 6 | 3.9 | 4.8 | NC | 2.1 | 3.0 | NC | 4.1 | 5.9 | ** | ** |
| | 7 | 8.6 | 8.3 | NC | 4.8 | 4.8 | NC | 9.7 | 7.9 | 2.6 | 2.0 |
| | 8 | 13.2 | 13.7 | 7.2 | 7.7 | 9.4 | 3.1 | 13.7 | 15.6 | 4.6 | 5.1 |
| | 9 | 13.6 | 17.2 | NC | 9.0 | 11.4 | NC | 14.4 | 16.1 | 5.0 | 5.4 |
| | 10 | 18.7 | 20.1 | 12.6 | 12.2 | 13.4 | 6.5 | 18.1 | 18.2 | 7.6 | 7.9 |
| | 11 | 19.3 | 22.6 | NC | 13.8 | 15.7 | NC | 16.9 | 19.5 | 6.8 | 9.3 |

*Notes:*
[a]IPRC Survey, 1991.
[b]IPRC Survey, 1992.
[c]National Survey of High-School Seniors, (MTF), Class of 1991.
[d]**=Less than 1.0 percent.
[e]NC denotes data were not collected.

*Source*: Indiana Prevention Resource Center.

**Table 12.9 Current Use of Cigarettes, Marion County Students by Grade, Ethnicity and Year of Survey**

| | Year of Survey | | |
|---|---|---|---|
| | 1987 (%) | 1988 (%) | 1990 (%) |
| Grade 10 | | | |
| White | 32 | 30 | 30 |
| Nonwhite | 11 | 11 | 10 |
| Grade 12 | | | |
| White | 35 | 37 | 36 |
| Nonwhite | 14 | 13 | 13 |

*Note*: "Current" means used in 30 days prior to survey.

*Source*: I-STAR.

and 22% among 12th-graders (Table 12.10). The 1991 IPRC study reported use of smokeless tobacco to be a great deal higher among males than females. Nearly half (47%) of the Hoosier senior males reported monthly use, and one in six (17%) reported daily use of smokeless tobacco. Ages 12 to 15 were most common for initiation of use by young Hoosiers. The 1990 I-STAR survey found that 6% of the 10th-graders and 9% of the 12th-graders had used smokeless tobacco in the past month; the figures have stayed very nearly the same for five years. Many more males than females and more than four times as many whites as nonwhites reported using smokeless tobacco in the month prior to each of the annual I-STAR surveys.

## Illegal Drugs

### National trends

Illegal drug use continues to present serious health risks for too many infants, children and teens. The business in illegal drugs too often creates additional hazards for the young people who must negotiate increasingly violent streets, homes, and schools. Yet, other trends in the total picture of juvenile drug use are a bit more encouraging:

- 1990 saw a continuation of the longer-term gradual decline in the use of any illicit drug, including crack and cocaine, by high-school seniors, college students, and young adults in the prior year (MTF, 1990; NHS).
- Of the illicit drugs, marijuana and inhalants show the earliest pattern of initiation, peaking between grades 6 and 9. For cocaine and hallucinogens, initiation peaks between grades 10 and 11. Initiation for all drugs falls off at grade 12 (MTF, 1990).
- Although more males tend to use illicit drugs than do females—particularly at higher frequency levels—gender differences have been narrowing in the past few years. This is generally attributed to a decline in use among males (MTF, 1990).
- Among 18- to 25-year-olds, use of marijuana, cocaine, and crack declines with educational attainment (NHS).
- In the 12-17 and 18-25 age groups, white respondents

### Table 12.10 Percent of Students in Grades 5 - 12 Reporting Monthly Use of Alcohol and Other Drugs, United States and Indiana

| United States | | | | | Indiana[c] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NHS 1990[a] | MTF 1991[b] Grades | | | | Grades | | | | | | | |
| Ages 12-17 (%) | 8 (%) | 10 (%) | 12 (%) | Drug | 5 (%) | 6 (%) | 7 (%) | 8 (%) | 9 (%) | 10 (%) | 11 (%) | 12 (%) |
| 11.6 | 14.3 | 20.8 | 28.3 | Cigarettes | 5.5 | 12.9 | 16.9 | 24.8 | 28.4 | 31.3 | 34.9 | 36.2 |
| 3.9 | 6.9 | 10.0 | NC | Smokeless tobacco | 3.9 | 5.9 | 7.9 | 15.6 | 16.1 | 18.2 | 19.5 | 21.7 |
| 24.5 | 25.1 | 42.8 | 54.0 | Alcohol | 10.4 | 16.0 | 22.9 | 35.1 | 41.8 | 47.1 | 50.2 | 56.1 |
| 5.2 | 3.2 | 8.7 | 13.8 | Marijuana | ** | 1.7 | 3.3 | 6.7 | 9.6 | 11.8 | 14.7 | 14.4 |
| **[d] | 0.5 | 0.7 | 1.4 | Cocaine | ** | ** | ** | 1.2 | 1.9 | 1.9 | 2.4 | 3.1 |
| NC[e] | 0.3 | 0.3 | 0.7 | Crack | ** | ** | ** | 1.1 | 1.5 | 1.1 | 1.5 | 2.0 |
| 2.2 | 4.4 | 2.7 | 2.4 | Inhalants | 3.6 | 4.3 | 5.5 | 7.4 | 5.2 | 4.8 | 4.5 | 3.9 |
| 1.0 | 2.6 | 3.3 | 3.2 | Amphetamines | ** | 1.0 | 3.0 | 6.6 | 7.5 | 7.5 | 8.9 | 7.5 |
| NC | 0.8 | 1.2 | 1.4 | Tranquilizers | 1.4 | 2.4 | 3.7 | 7.0 | 5.8 | 6.4 | 6.0 | 5.3 |
| NC | NC | NC | 0.1 | Narcotics | ** | ** | 1.8 | 3.3 | 3.4 | 3.7 | 3.8 | 3.2 |
| ** | 0.8 | 1.6 | 2.2 | Psychedelics | ** | ** | 1.4 | 2.2 | 3.3 | 4.7 | 5.7 | 5.6 |
| NC | 0.3 | 0.2 | 0.2 | Heroin | ** | ** | ** | ** | 1.3 | 1.1 | 1.4 | 1.8 |
| NC | 0.4 | 0.6 | 0.8 | Steriods | ** | 1.3 | 1.7 | 1.7 | 1.6 | 1.6 | 1.9 | 2.1 |

*Notes:* [a] National Household Survey on Drug Abuse (NHS) 1990..
[b] National Survey of High-School Seniors, (MTF), Class of 1991.
[c] IPRC Survey, 1992.
[d] **=Less than 1.0 percent.
[e] NC denotes data were not collected.

*Source:* Indiana Prevention Resource Center.

were more likely to have used marijuana, inhalants, and hallucinogens than were African-Americans and Hispanics/Latinos (NHS; MTF, 1990).

- Although use of cocaine and crack was relatively low among 12- to 17-year-olds in all three ethnic groups, African-American males and Hispanic females reported slightly higher use than did whites. Similar patterns were found among 18- to 25-year-olds (NHS). Among high school seniors, African-American males and females had lower annual use than whites; Hispanic males and females had the highest prevalence of annual use (MTF, 1990).
- Despite improvements in recent years, American high-school students and young adults are involved with illicit drugs to a greater extent than are their age peers in any other industrialized nation in the world.

## Trends in Indiana

Reported use of illegal drugs by Hoosier adolescents varies from national patterns according to the substance involved.

*Marijuana.* Tables 12.1 and 12.2 summarize comparative data from the two national surveys and the 1992 Indiana Prevention Resource Center study. After alcohol and tobacco, marijuana is the drug of choice for more Hoosier students than any other. Lifetime prevalence among seniors appears to be slightly lower in Indiana (31%) than nationally (37%), but Hoosier seniors catch up in annual prevalence rates and, as was true for tobacco and alcohol use, exceed national averages in current use (in the past month) of marijuana. About one in 20 Hoosier seniors (4%) reported daily use of marijuana. In monthly prevalence, Indiana students overtake the national average for 12- to 17-year-olds by grade 8 (Table 12.10). The IPRC study concluded: "While fewer Hoosiers experiment with marijuana, occasional use is about average and daily use is somewhat higher than the national average."[9]

*Cocaine.* Hoosier seniors' use of cocaine at some time in their lives is also below the national lifetime prevalence figures. However, annual and current use are about the same. Relatively few Hoosier seniors reported ever having used crack cocaine, and all rates of use remained below national figures.

Nationally, in both the Monitoring the Future and National Household Survey studies, *gender differences* in use of marijuana and cocaine were similar: males were more likely to report use at all three prevalence levels. The IPRC and I-STAR data followed national gender-related trends. *Ethnic differences* were more complex, however. Combining MTF study responses for the classes of 1985 through 1989, the researchers found both Native American males and females reported the highest annual use of marijuana followed, in order, by whites, Hispanics/Latinos, African-Americans and Asians. Hispanic males reported the highest annual prevalence of cocaine use, followed by Native American, white, African-American and Asian males. Among females, Native Americans reported highest annual prevalence, followed by whites, Hispanics/Latinos, Asians and African-Americans.

The I-STAR report of Marion County students did not distinguish among nonwhite racial/ethnic groups in reporting use of marijuana and cocaine. At both grades 10 and 12, however, white students tended to report slightly greater use in the past month than nonwhite students. (Only among 10th-graders in 1988 was marijuana use slightly higher among nonwhite students.) Reported cocaine use was very low among all students; however, nonwhite tenth-graders had slightly higher monthly prevalence rates in 1987 and 1988. In 1990, prevalence levels were the same among white and nonwhite Marion County 10th-graders, and slightly higher among white 12th-graders (Table 12.11).

**Table 12.11 Percent Reporting Current Use of Marijuana and Cocaine, Marion County Students by Grade, Ethnicity and Year of Survey**

| | Year of Survey | | |
|---|---|---|---|
| | 1987 (%) | 1988 (%) | 1990 (%) |
| **Marijuana use** | | | |
| Grade 10 | | | |
| White | 18 | 13 | 12 |
| Nonwhite | 10 | 14 | 4 |
| Grade 12 | | | |
| White | 23 | 21 | 15 |
| Nonwhite | 20 | 16 | 12 |
| **Cocaine use** | | | |
| Grade 10 | | | |
| White | 1.4 | 3.5 | 1 |
| Nonwhite | 1.8 | 4.8 | 1 |
| Grade 12 | | | |
| White | 2.5 | 2.8 | 1 |
| Nonwhite | 2.0 | 0.1 | 0 |

*Note:* "Current" means used in 30 days prior to survey.

*Source:* I-STAR.

*"Pill" use*. The greatest differences in usage of all drugs surveyed between Hoosiers and their national counterparts were in patterns of "pill" use—amphetamines, tranquilizers, and narcotic analgesics. Hoosier seniors were more likely to use *all* of

these drugs at all usage levels: lifetime, annual and current. Furthermore, Hoosier students overtook the national average lifetime prevalence rates among 12- to 17-year-olds for amphetamines and tranquilizers by grade 6. The MTF (1990) study found white and male seniors to be heavier users of these drugs. However, among Hoosier seniors, the 1991 IPRC study found that girls were about twice as likely as males to report lifetime use, while annual and monthly prevalence rates were higher among males. Data describing patterns of use of these substances by Hoosier racial/ethnic groups were not available.

## Summary of Trends in Indiana

Several trends emerge from the studies of alcohol, tobacco and other drug use by young people in Indiana and the rest of the nation:

- More young Hoosiers have ever smoked cigarettes than their counterparts nationally, and more Hoosier students are current and heavy smokers.
- About the same percentages of young Hoosiers have ever tried alcohol as young people elsewhere in the nation, but they are more likely to be current drinkers, to use alcohol daily, and to consume five or more drinks in a row (binge drink).
- Hoosier seniors are less likely to have ever tried marijuana and cocaine than seniors elsewhere, but again, among those who have used these drugs, Indiana high-school seniors are more likely to report current and regular use.
- White Hoosier students are considerably more likely than nonwhite students to report having used cigarettes, alcohol, and marijuana in the month prior to the survey; ethnic differences are small in reports of monthly prevalence of cocaine use.
- Hoosier students use "pills"—amphetamines, tranquilizers and analgesic narcotics—at rates that exceed the national averages.
- Drug use increases with age and grade in school; grades 7 to 10 show the greatest year-to-year increases.

### Alcohol and drug arrests in five Indiana counties

The report of the United Way/Community Service Council of Central Indiana compiled information on alcohol and drug arrests for five Indiana counties: Boone, Hamilton, Hancock, Marion, and Morgan (Table 12.12), using the only sources available—arrest records of the law enforcement agencies in each county. In Marion County, jail logs were used.[10] The data have several limitations and should be used with caution; only percentages have been reported here. There are significant variations among the counties, however, suggesting that justice may vary with geography. Several factors could account for the differences: variance in law enforcement policy; demographic characteristics such as age distribution and socioeconomic status of county residents; and seasonal fluctuations reflected in the data. The presence of variation from one county to another poses intriguing questions for further research on the ways in which Indiana's young alcohol and drug users are treated by the law.

**Table 12.12 Alcohol and Drug Arrests by Age Group for Five Central Indiana Counties, 1991**

| | % of All Alcohol Arrests Age Group | | % of All Drug Arrests Age Group | |
|---|---|---|---|---|
| County | 13 - 20 | 21 - 25 | 13 - 20 | 21 - 25 |
| Boone | 29 | 15 | 14 | 32 |
| Hamilton | 19 | 24 | 21 | 21 |
| Hancock | 26 | 18 | 18 | 27 |
| Marion | 8 | 20 | 11 | 27 |
| Morgan | 24 | 17 | 50 | 27 |

*Source*: United Way/Community Service Council. *Reducing Alcohol and other Drug Abuse in Central Indiana.* Vol. II.

## Drug use by juvenile male arrestees/detainees in Indianapolis

Statewide data on the numbers of arrestees who test positive for drug use are not available; however, Indianapolis is one of 24 U.S. cities taking part in the Drug Use Forecasting (DUF) Program conducted by the National Institute of Justice since 1987. In this program booked arrestees who voluntarily agree are tested for 10 different drugs by urinalysis. Among adult arrestees booked in Indianapolis during January to March 1991, 53% of the males and 57% of the females tested positive for one or more drugs. Indianapolis is also one of 10 cities that includes juvenile males in the DUF Program (drug testing for juvenile offenders is mandatory in Indiana). In the same time period as the adult study, 16% of the 102 juvenile arrestees tested positive for drug use. Among juvenile arrestees, positive tests for marijuana use were most frequent (15%), followed by cocaine (3%). Four percent of the juveniles tested positive for two or more drugs. The percentage testing positive for any drug was lowest in St. Louis (9%) and highest in Los Angeles (38%) among the ten cities participating in the study.[11]

## Steroids

The use of anabolic/androgenic steroids, once confined mainly to adult bodybuilders and elite competitive athletes, is still relatively uncommon but appears to be growing among American young people. Half a million Americans under age 18 may be using steroids in hopes of improving athletic performance, appearance, and/or self-image. The use of steroids at some time in their lives reported in 1990 by U.S. high-school seniors was about 3% (5% among males and .5% among females). Lifetime prevalence reported by Indiana high school seniors in 1991 was slightly lower, at 2% (4% among males, and less than 1% among females). Although differences were slight, the pattern was reversed a year later: 4% of the Hoosier seniors in 1992 and 2% of the national Class of 1991 reported having used steroids at some time in their lives (Table 12.1). Reported lifetime prevalence among Indiana students in grades 8 through 11 was higher, reaching 5% among 10th-grade males and 1% among 8th-grade females (IPRC, 1991). The 1992 IPRC survey found slight increases in lifetime prevalence at all grade levels over the figures reported a year earlier (Table 12.2).[12]

### The effects of steroid use

Anabolic/androgenic steroids are synthetic derivatives of the natural male hormone, testosterone. *Anabolic* means growing or building, and *androgenic* means masculinizing. Although use of steroids has been banned by the International Olympic Committee and its member associations since 1975 and anabolic steroids have been classified as controlled substances by toughened federal law since 1990, numerous drugs with various combinations of anabolic and androgenic properties are currently available on the black market. Athletes who use steroids report increases in lean muscle mass, strength, and endurance. To date, however, *no* studies have shown conclusively that use actually enhances competitive performance.

Steroid use presents a number of risks to young people. One survey completed in 1986 found that 45% of 200 high-school users used these drugs to enhance appearance. Essentially, this purpose translates into a desire to speed up the normal maturation process. Actually, steroid use has been found to *halt* growth prematurely in adolescents. Research on the psychological and behavioral effects of steroid use is relatively new, but findings to date are not encouraging. Some steroid users appear to be subject to feelings of paranoia, delusions, and impaired judgment. Others reveal wide mood swings ranging from bouts of depression to periods of sometimes homicidal violence known to users as "roid rages." Finally, while most steroids are ingested orally, some are injected intramuscularly, often with large reusable needles, also obtainable on the black market. Sharing needles among steroid users carries the same risks for transmitting HIV/AIDS and other infectious diseases as injecting any other drug.[13]

***Studies have found that steroid use halts adolescent growth, impairs judgment, alters moods, and sometimes causes homicidal violence.***

The 1990 NIDA *National Household Survey* did not ask respondents about steroid use. There was a question, however, about the perceived degree of risk presented by the use of steroids. Among 12- to 17-year-olds, 53% felt that there was "great risk" in using anabolic steroids occasionally, while 80% felt that regular use presented great risk. The proportion responding similarly fell slightly among the 18- to 25-year-olds, but it rose significantly among respondents ages 35 and over. As is true for other illicit drugs, data on steroid use suggest that education efforts would be most effective if begun with children before they reach the middle grades.

## Policy Implications

Noting the continued downward trends of drug use among high-school seniors and young adults, researchers at the University of Michigan did extensive analyses of the data presented in *Monitoring the Future*. They reached the following conclusions:

> It appears that large proportions of young people do pay attention to new information about drugs, especially risks and consequences; such information, presented in a realistic and credible fashion, plays a vital part in reducing the demand for a drug. The evidence available thus far shows clearly that such reduction in demand has been the key to controlling the epidemics of marijuana use and cocaine use.[14]

The following implications for policy and intervention strategies are drawn from the **Indiana Prevention Resource Center** (1991) study:

- Among young Hoosiers "there is significant lifetime history of at least occasional use of alcohol, cigarettes, smokeless tobacco, and inhalants by the 5th grade, indicating that prevention programs on these 'gateway drugs' need to begin sooner than 5th grade."
- "Reported lifetime use rates for crack and heroin suggest that use levels are so low in Indiana that prevention programs should not unduly focus on these drugs."

- The high rates of use of alcohol, cigarettes, smokeless tobacco, marijuana, and the "pills"—amphetamines, tranquilizers, and narcotic analgesics—suggest that more emphasis and effort needs to be focused on preventing the use of these drugs.
- The high daily use of alcohol by Indiana's 10th- through 12th-graders "suggests a problem that needs to be addressed."

The conclusions reached by the **United Way/Community Service Council** about prevention strategies and services appropriate for Central Indiana are applicable to the state as a whole. Included among their recommendations are the following:

> In developing a comprehensive strategy to reduce alcohol and other drug abuse, all aspects of society have a role in the effort. In terms of law enforcement and the justice system, there must be efforts to reduce the supply of drugs in the community and to enforce laws governing possession, use and distribution of all drugs, including alcohol. . . . The courts need a wide array of options and sentencing alternatives for dealing with those who come in contact with the system.
>
> Prevention efforts must be aimed at demand reduction and must be available to all members of society. Prevention approaches can be classified in two ways: by strategy and by target. Strategies can be coercive or noncoercive. Coercive strategies take the form of laws, policies and other regulatory means. Noncoercive strategies are in the form of education and skill building or development. Both strategies are necessary. The critical aspect of any prevention strategy is that it incorporates ways of dealing with the drug, the individual, and the environment.
>
> Prevention programs should include cognitive, affective, and skill components. All efforts [should] be appropriate for the groups that they target, with cultural and ethnic sensitivity and developmental (age) appropriateness. Prevention services must be available in all school systems and at all grade levels, *with* complementary components in every community and neighborhood.
>
> The importance of changing the social environment has been stressed in the major reviews of the effectiveness of prevention strategies. Social and political changes designed to improve the quality of life may be the most effective strategy for prevention. Alcohol and other drug abuse is woven into the fabric of life and, if we are to effectively deal with the problem, we must inspect and repair the entire garment.[15]

## Notes

1. National Institute on Drug Abuse, Division of Epidemiology and Prevention Research, *National Household Survey on Drug Abuse: Main Findings 1990*. DHHS Publication No. (ADM) 91-1788 and *National Household Survey on Drug Abuse: Population Estimates 1990*. DHHS Publication No. (ADM) 91-1732 (Washington, DC: U.S. Department of Health and Human Services, Alcohol, Drug Abuse, and Mental Health Administration, 1991); L. D. Johnston, P. M. O'Malley, and J. G. Bachman, *Drug Use Among American High School Seniors, College Students and Young Adults, 1975-1990*. Volume I: High School Students; Volume II: College Students and Young Adults (Washington, DC: U.S. Department of Health and Human Services, Alcohol, Drug Abuse, and Mental Health Administration, 1991).

2. Indiana Prevention Resource Center, *Alcohol and Other Drug Use in Indiana* (Bloomington, IN: Indiana Prevention Resource Center, 1991).

3. Tabulated data provided by Project I-STAR Incorporated; Project I-STAR, Incorporated. News Release: "Drug use declining among Marion County youth," November 26, 1991.

4. United Way/Community Service Council of Central Indiana, *Reducing Alcohol & Other Drug Abuse In Central Indiana*. Volume I: Needs and Services, Volume II: Strategies for Community Action. Indianapolis: United Way/Community Service Council of Central Indiana, 1991).

5. N. T. Ellis and M. R. Torabi, *The Indiana Student Health Survey* (Indianapolis: The Indiana Department of Education, 1992).

6. Information supplied by the Indiana Department of Transportation, 1992.

7. L. D. Johnston, Press Release from the University of Michigan, January 27, 1992. Cited in "Prevention Survey Shows Steady Progress," *I-STAR Reporter*, 5, 4 (March/April 1992), p. 4.

8. Ellis and Torabi, *The Indiana Student Health Survey*.

9. Indiana Prevention Resource Center, *Alcohol and Other Drug Use in Indiana* (Bloomington, IN: Indiana Prevention Resource Center, 1991).

10. United Way/Community Service Council of Central Indiana, Inc., *Reducing Alcohol & Other Drug Abuse in Central Indiana*, Vol. II, pp. 8-21.

11. n.a. "Drug Use Forecasting (DUF) Research Update," *National Institute of Justice Research in Action* (November 1991), pp. 1-4.

12. Indiana Prevention Resource Center, *Alcohol and Other Drug Use in Indiana*, 1991 and 1992. It must be kept in mind that, when broken down into gender and grade-level groups, the Indiana samples are small and subject to standard errors large enough to account for most differences in the Indiana and national prevalence levels.

13. National Institute on Drug Abuse, *Anabolic Steroids: A Threat to Body and Mind*. DHHS Publication No. (ADM) 91-1810 (Washington, DC: Alcohol, Drug Abuse, and Mental Health Administration, U.S. Department of Health and Human Services, 1991).

14. Conclusions from earlier work of same authors cited in Johnston, O'Malley, and Bachman. *Drug Use Among American High School Seniors*, Vol I., p. 185.

15. United Way/Community Service Council of Central Indiana, *Reducing Alcohol & Other Drug Abuse in Central Indiana*, Vol. II, pp. 23-25.

Chapter 13

# Injuries and Deaths

## Injuries

Injuries are a major problem for children of all ages. Injuries may be broadly classified as accidental (or unintentional) and intentional (occurring in the course of an assault or suicide attempt). In the long term, the *proportion* of deaths caused by injuries to American children, adolescents, and young adults has risen. This rise is in large measure a consequence of medical advances in reducing the impact of infectious diseases, a more pronounced cause of death in these age groups before antibiotics and other modern treatments became available.

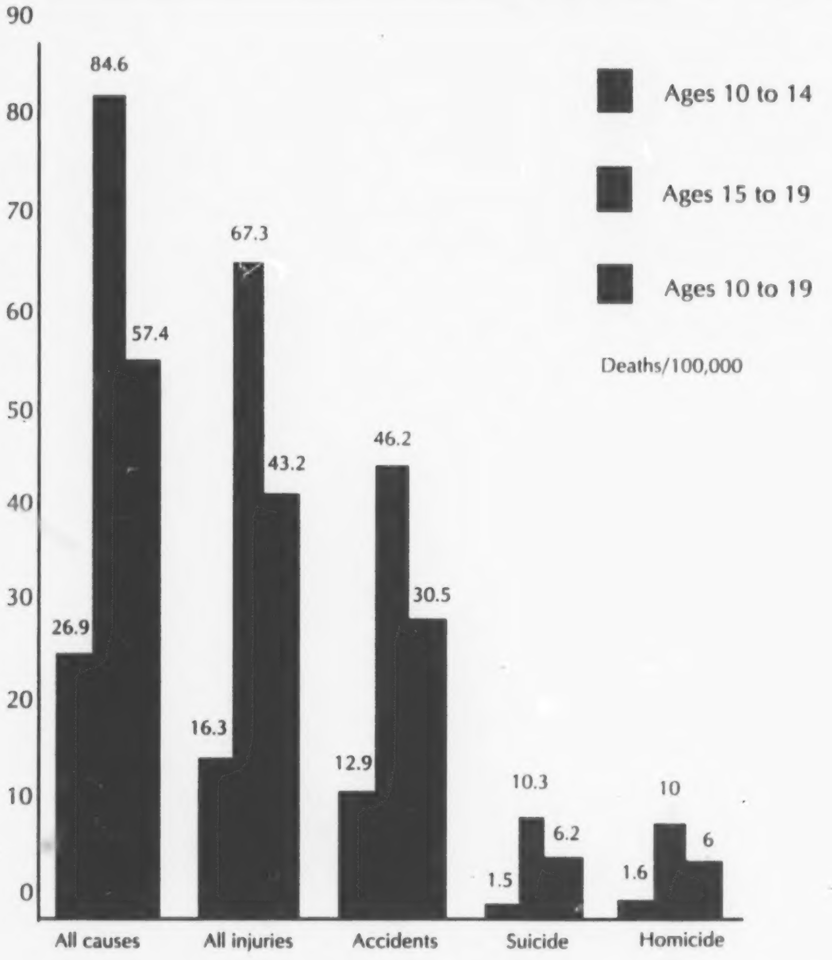
### National trends

Figure 13.1 presents 1987 death rates among all American adolescents ages 10 to 19. Injuries of all types are the leading cause of death for this age group. Accidental deaths predominate, accounting for more than half of *all* deaths and seven in ten *injury* deaths.[1]

Long-term trends in the *rates* of death from injuries, however, have been related to the age of the young people involved. The Report to Congress by the Office of Technology Assessment noted the following national trends in deaths from injuries:

> *Injury death rates* for adolescents ages 10 to 14 decreased from 23.6 deaths per 100,000 in 1950 to 16.3 per 100,000 in 1987, but the rates for adolescents ages 15 to 19 actually increased over the same period, from 55.6 deaths per 100,000 to 67.3 per 100,000. *Accidental injury death rates* for adolescents declined between 1970 and the mid-1980s. But between 1986 and 1987, they leveled off for 10- to 14-year-olds and increased for 15- to 19-year-olds.[2]

**Figure 13.1 Death Rates Among United States Adolescents, by All Causes and External Causes of Death, 1987**



*Source:* Office of Technology Assessment, 1991.

## Trends in Indiana

Table 13.1 summarizes information for 1989 presented in detail in Chapter 1. Injuries, both accidental and intentional, are responsible for a high proportion of deaths among young Hoosiers. Motor vehicle fatalities overtake other types of accidents in the age 5 to 14 group to become the leading cause of death. Vehicular accidents remain the leading cause of death by an even broader margin in the next older group, the 15- to 24-year-olds. In this age group, intentional injuries (suicide and homicide) become major causes of death, as well.[3]

**Table 13.1 Selected Leading Causes of Death Among Indiana Youths and Young Adults, by Age, 1989**

| | Age (in years) | | | |
|---|---|---|---|---|
| **Causes of Death** | **Under 1** | **1 - 4** | **5 -14** | **15 - 24** |
| Congenital anomalies | 187 | 14 | 9 | 8 |
| Accidents | 21 | 57 | 104 | 363 |
| *Nonvehicular* | *18* | *38* | *45* | *82* |
| *Motor vehicles* | *3* | *19* | *59* | *281* |
| Suicide | 0 | 0 | 2 | 117 |
| Homicide | 5 | 7 | 8 | 76 |
| Heart disease | 16 | 3 | 8 | 25 |
| Cancer | 3 | 9 | 36 | 36 |
| **Total deaths** | **845** | **142** | **238** | **739** |

*Note*: Causes accounting for 10 or more deaths.

*Source*: Indiana State Department of Health.

# Vehicular Accidents

## National trends

Vehicle-related accidents are the leading cause of accidental death among U.S. adolescents ages 10 to 19. Adolescent drivers ages 16 to 19 hold only 6% of the nation's drivers' licenses, but they account for 13% of all motor vehicle crashes. Crash statistics are related to the weekly driving patterns of typical adolescents. About one-fifth of the driving time of adolescent drivers takes place at night, yet more than half of their fatal accidents occur during nighttime hours.[4] A study of 1,903 accident reports involving adolescent drivers in Wichita, Kansas, found the usual higher prevalence of accidents among male drivers, and injury and/or alcohol-related accidents associated with nighttime driving, often on weekends. The research also determined, however, that nighttime and weekends were not the only high-risk periods for young drivers. More accidents occurred on school days, and these accidents were clustered during the times that young drivers were likely to be on the road: before school, during lunch hours, and immediately after school. Considering all accidents in this adolescent population, noon to 6:00 p.m. daily was the period of highest risk.[5]

## Trends in Indiana

In 1990, Indiana had a relatively low motor-vehicle death rate for drivers in all age groups: 1.8 deaths per million miles driven. Indiana was tied with four other states, ranking eighth among the 50 states.[6] While age-specific death rates per miles driven for the state of Indiana are not

**Table 13.2a Operator's License Holders and Motor Vehicle Accidents Among Young Indiana Drivers, 1990**

| | Number | As % of Total |
|---|---|---|
| Drivers with operator's license | | |
| Under 21 (71.7%) | 315,604 | 7.4 |
| Under 20 (68.5%) | 237,963 | 5.6 |
| Accidents | | |
| All accidents (driver < 20) | 50,031 | 14.2 |
| Fatal accidents | 181 | 12.7 |
| Accidents with injuries | 14,163 | 16.1 |
| Alcohol involved (driver < 21) | 1,211 | 18.8 |

*Source*: Indiana Department of Transportation.

available, the Indiana Department of Transportation has relevant information in other forms. Young Hoosiers, as is true for their counterparts elsewhere, account for more than their share of accidents (Tables 13.2a and 13.2b).

Figures from the Indiana Department of Transportation show that about seven in ten (72%) Hoosiers ages 16 to 21 are licensed drivers. Drivers *under age 20* constitute just under 6% of all license holders, yet were involved in 14% of all accidents, 13% of the accidents with fatalities, and 16% of the accidents resulting in injuries. Alcohol use in Indiana is illegal for persons under age 21. Drivers *under age 21* make up 7% of all license holders, but were associated with nearly 19% of the accidents that involved alcohol (Table 13.3).[7]

**Table 13.2b Percentage of Indiana Vehicular Accidents by Age Group, 1990**

| Age | All Accidents (%) |
|---|---|
| 16 | 4.3 |
| 17 | 5.1 |
| 18 - 19 | 9.6 |
| 20 - 24 | 17.0 |
| 25 - 34 | 25.4 |
| 35+ | 38.7 |
| **Total** | **100.1** |
| Total vehicular accidents | 133,104 |

*Note*: Columns may not total 100% because of rounding.

*Source*: Indiana Department of Transportation.

## Some surprising findings about driver education

One of the few "rites of passage" broadly available to American young people is the process of acquiring a driver's license. Becoming a licensed driver brings new and more demanding responsibilities within the family and community, changed status among peers, and a great deal more mobility and freedom of choice regarding places to go. "Driver's Ed'" has been an important course option and prelude to a license for two generations of high-school students. States and communities have been willing to subsidize courses in driver education in the hope that safety lessons would supplement skill training and help create safer streets and highways for all.

In 1969, the Highway Research Board of the National Academy of Sciences/National Academy of Engineering did a review of driver education and concluded that, given what was known, it was not possible to draw valid conclusions regarding the impact of driver education on subsequent driver behavior and performance, particularly as measured by accidents and

**Table 13.3 Alcohol-Related Vehicular Accidents by Age, Indiana, 1990**

| Age | Alcohol-Related Accidents (%) |
|---|---|
| 17 and under | 8.9 |
| 18 | 2.8 |
| 19 - 20 | 7.1 |
| 21 - 24 | 15.9 |
| 25 - 34 | 34.5 |
| 35+ | 30.8 |
| **Total** | **100.0** |
| Total number of alcohol-related accidents | 6,452 |

*Source:* Indiana Department of Transportation.

traffic law violations. Since the mid-1970s, when a report to Congress by the National Highway Traffic Safety Administration drew similar conclusions, a growing number of states and communities have been rethinking driver education programs.[8]

Two carefully constructed research studies have examined the impact of driver education classes on teenage drivers and their involvement in fatal crashes. After examining records from 27 states (including Indiana), Robertson and Zador found that driver education was associated with a great increase in the number of 16- to 17-year-old licensed drivers:

> About 80% of the 16-17-year-olds who took high school driver education obtained licenses that they would not otherwise have obtained until age 18 or thereafter. The net effect is much higher death involvement rates per 10,000 population, on average, in states with greater proportions of 16-17-year-olds receiving high school driver education. The data suggest that most teenagers would obtain licenses when they are 18-19 years old, irrespective of high school driver education, and indicate that differences among the states in fatal crash involvement rates per 10,000 licensed 18-19-year-old drivers were not significantly related to either high school driver education or delayed licensure.[9]

***Two studies found that driver education classes increased the number of 16- to 17-year-old licensed drivers, unintentionally creating a concommitant increase in the number of vehicular accidents among young people who otherwise may not have obtained licenses until they were 18 or 19 years old.***

In 1976, the state of Connecticut eliminated state funding for high-school driver education. Some communities subsequently dropped the course while others did not, presenting an opportunity for a natural "experiment" on the impact of driver education. Robertson found that in communities that dropped driver education, substantial reduction occurred in the numbers of 16-to 17-year-olds who became licensed drivers. As a result, the number of crashes involving 16- to 17-year-old drivers was also substantially reduced. The researchers concluded that the net impact of driver training is to *increase* vehicular accidents involving young drivers because such training encourages more young people to "take to the road." The National Committee for Injury Prevention and Control recommends:

> Because no current driver education course can perform effectively the tasks required of it, research should be conducted to document the skills involved in driving and the most appropriate strategies for teaching the skills to beginning drivers.[10]

Information about the impact of driver training in the state of Indiana is not available.

## Seat Belts and Child Safety Seats

The use of automobile seat belts and child safety seats has been found to reduce both the number of fatalities and the seriousness of injuries in vehicular accidents—but only when they are installed and worn correctly. Although a majority of states have laws mandating the use of such restraints, states vary in application of the laws and in levels of enforcement. Strict enforcement, with consequences for violation, increases compliance with the laws. Education campaigns raise use of seat belts for a time, but considerable backsliding follows. People seem to need regular educational "booster shots" to maintain high levels of use.[11]

### Trends in Indiana

The Indiana mandatory seat-belt law became effective in 1987 and requires the use of lap belts in the front seat and restraint of children in proper seats. When the Indiana Department of Transportation has run "sight counts," they have found a little over five in ten Hoosier motorists to be wearing seat belts. Reports of vehicular accidents filed by the officer on the scene include information about seat belt use. These reports indicate that more than seven in ten motorists were wearing seat belts at the time the accidents occurred. Seat-belt use varied according to the age of the motorist, however. The records for 1990 show a slightly higher proportion of 16-year-olds than 17- to 19-year-olds were wearing seat belts. Use among the 20- to 24-year-olds remained low but rose at age 25 and thereafter (Table 13.4).

The Indiana Student Health Survey queried students on their use of safety belts; 29% of 9th-grade and 30% of 12th-grade students reported they had rarely or never used safety belts in the past year. Males at both grade levels were less likely to report use of safety belts than females. The same study found that males were slightly less likely than females to wear motorcycle helmets.

Indiana law requires the use of child safety seats or restraint systems for children under the age of five. Statewide data relating correct use of restraints to child deaths and injuries are not available. National studies have shown that, correctly used, safety seats can greatly reduce the risk of death or serious injury in vehicular accidents.[12]

**Table 13.4 Percentage of Accidents Where Seatbelts were Reportedly Used, by Age of Driver, Indiana, 1990**

| Age | Wearing Seatbelts when Accident Occurred (%) |
|---|---|
| 16 | 68.2 |
| 17 | 66.8 |
| 18 - 19 | 66.2 |
| 20 - 24 | 67.9 |
| 25 - 34 | 71.0 |
| 35+ | 75.6 |
| **All ages** | **71.4** |
| Total number of accidents where information was recorded | 133,104 |

*Source:* Indiana Department of Transportation.

## Driving Under the Influence

### National trends

Male teenage drivers with blood alcohol concentrations (BACs) of 0.05-0.10 percent are 18 times more likely than sober teens to be killed in single-vehicle crashes; the odds are even worse for females with similar blood alcohol concentrations: 54 times more likely.[13] As is true for many states, including Indiana, a blood alcohol concentration of 0.10 percent is the bottom line in the legal definition of driving under the influence (DUI). The national data show that BACs of half Indiana's "legal limit" are having an impact on single-vehicle crashes among teens, suggesting that it takes less alcohol to place an adolescent driver at risk for a serious or fatal crash.[14]

Nationally, the percentage of fatally injured drivers with BACs of 0.10 percent or higher begins to increase (to 17%) among 16- to 17-year-old males (Table 13.5). For 18- to 19-year-olds, who are still under age for legal purchase of all beverage alcohol in most states, the percentage of fatally injured male drivers who were DUI more than doubled, to 36%, and rose again to 51% among 20- to 24-year-olds, and to 59% among 25- to 34-year-olds. The pattern of increase with age is repeated among young female drivers, although not quite as dramatically.

**Table 13.5 Percentage of Fatally Injured Drivers with Blood Alcohol Concentration ≥ 0.10 Percent, 1990**

| | United States | |
|---|---|---|
| Age | Male (%) | Female (%) |
| 13 - 15 | 9 | 0 |
| 16 - 17 | 17 | 11 |
| 18 - 19 | 36 | 20 |
| 20 - 24 | 51 | 31 |
| 25 - 34 | 59 | 37 |
| 35 - 54 | 47 | 23 |
| 55+ | 18 | 5 |

*Note*: 0.10 percent is the lower limit of legal intoxication in Indiana and most other states.

*Source*: Insurance Institute for Highway Safety.

## Trends in Indiana

*The I-STAR Survey*. The I-STAR student surveys have contained questions relating to driving under the influence or riding with someone else who was driving under the influence. There was a steady decline from 19% in 1988 to 14% in 1990 among Marion County seniors who reported driving under the influence. Among 10th-graders, reported DUI behavior declined from 7% in 1988 to a little over 2% in 1990. At both grade levels, males were more likely than females to report driving under the influence. Consistent with drug use patterns, white Marion County seniors were more than twice as likely as nonwhite seniors to report DUI behavior. The pattern among 10th-graders was similar.

While there were marked differences in the percentages of seniors and sophomores who reported driving under the influence themselves, exposure to DUI by others was fairly similar. Of the seniors in 1990, 28% reported riding with someone who was under the influence, while 23% of the sophomores reported they had done so. For 12th-graders, there has been a consistent decline in the percentage reporting this behavior. For 10th-graders, however, there was an increase in exposure to DUI between 1989 and 1990. Gender differences in DUI exposure were not as great as in actual DUI behavior. Senior males and females, and sophomore females reported nearly the same exposure rates. Nonwhite students were about as likely as white students to drive with someone who was under the influence.

The I-STAR data suggest that an attitude change among some students has accompanied the declines in DUI-related behaviors. The survey asked how much respondents would care if a friend drove after drinking. The percentages saying they would care "very much" rose both among

10th-graders (from 89% in 1988 to 94% in 1990), and among 12th-graders (from 91% in 1988 to 96% in 1990). Females in both grades were slightly more likely to say they would care very much if a friend drove while under the influence, while there were essentially no differences between white and nonwhite student responses to this question.[15]

*The Indiana Student Health Survey.* Patterns in exposure to driving under the influence were similar in the Student Health Survey. Of the 9th-graders, 33% of both males and females reported riding one or more times in the past 30 days in a vehicle driven by someone who had been drinking alcohol, while 37% of the seniors (40% of the males vs. 34% of the females) had done so.

More 12th-graders (20%) than 9th-graders (8%) reported that they had driven a vehicle one or more times in the past 30 days when they had been drinking alcohol. This behavior was more prevalent among males than among females at both grade levels.

## Youth Suicide

### National trends

Otis Bowen, formerly governor of Indiana and later U.S. Secretary of Health and Human Services, convened a national task force to examine youth suicide. The four-volume report that appeared in 1989 is the most comprehensive summary ever compiled, and it contains many recommendations for translating what is known about youth suicide into preventive actions. Still, the task force members felt that much remained to be learned about this perplexing subject.

***Nationally, suicide is the second leading cause of death among 15- to 24-year-olds—and experts believe the reports reflect only about half to 85% of the true number of cases.***

Nationally, suicide is the second leading cause of death among 15- to 24-year-olds. Even so, experts feel that reports reflect somewhere between half and 85% of the true number of cases. Research studies consistently link a variety of biochemical, behavioral, and social characteristics to suicide attempts. An incomplete list includes alcohol or drug use (by self or parents), neglect, physical or sexual abuse, mental illness, pressure to excel, family violence or disruption, incarceration in jails or juvenile detention centers, and ready access to lethal methods.[16] For homosexual youths, the period of coming to self-acceptance is often a time of heightened vulnerability. One section of the report notes:

> A majority of suicide attempts by homosexuals occur during their youth, and gay youth are 2 to 3 times more likely to attempt suicide than other young people. They may comprise up to 30 percent of completed youth suicides annually. . . . Gay youth face problems in accepting themselves due to internalization of a negative self image. . . . Gay youth face extreme physical and verbal abuse, rejection and isolation from family and peers. They often feel totally alone and socially withdrawn out of fear of adverse consequences.[17]

Isolation and despair, whatever the source, place adolescents and young adults at risk. Since the 1950s, there has been an overall upward trend in youth suicide nationally, among both white and nonwhite young people. In 1987, suicide accounted for about one in twenty of the deaths of 10- to 14-year-olds, and one in eight of the deaths of 15- to 19-year-olds. That same year, the *death rates* from suicide were 1.5 per 100,000 youths ages 10 to 14, and 10.3 per 100,000 youths ages 15 to 19.

Suicide completion rates are considerably higher among males than females, and higher among white than African-American youths. There are few data related to uncompleted suicide attempts, but many of them result in serious injuries. In an Oregon study, 6% of the high school students surveyed reported a suicide attempt, while in the Minnesota Adolescent Health Survey of 1986-87, 7% of the males and 14% of the females in grades 7 to 12 reported at least one suicide attempt. In a national sample of 8th- and 10th-graders surveyed by the American School Health Association, 14% reported a suicide attempt. The ages and other demographic characteristics of the populations sampled and the wording of questions differed among these studies. However, all three studies were consistent in finding far higher percentages of reported suicide attempts than initially anticipated.[18]

## Trends in Indiana

As is true for the nation, suicide is second only to motor vehicle accidents as a cause of death among Indiana's older adolescents and young adults. Trend data for Indiana are reported for young persons ages 15-24 (Table 13.6). The annual number of youths who took their own lives fluctuated only slightly between 1985 and 1989; however, trends in both numbers and *rates* of youth suicide in Indiana have been gradually upward. In 1989, the 117 suicides constituted 16% of all deaths among 15- to 24-

year-olds. Consistent with national race and gender patterns, the deaths of 99 white males, 13 white females, five nonwhite males and no nonwhite females were recorded as suicide. In addition, two white males under age 15 took their own lives.

**Table 13.6 Deaths from Suicide and Homicide Among Indiana Youths, 1984 - 1990**

| | Suicide | | Homicide | | | |
|---|---|---|---|---|---|---|
| | All Youths | | All Youths | | Nonwhite males | |
| Year | Number | Rate* | Number | Rate* | Number | Rate* |
| 1984 | 105 | 10.7 | 75 | 7.6 | 30 | 58.0 |
| 1985 | 116 | 12.0 | 75 | 7.8 | 28 | 54.0 |
| 1986 | 115 | 12.1 | 72 | 7.6 | 28 | 53.9 |
| 1987 | 113 | 11.9 | 68 | 7.1 | 25 | 53.5 |
| 1988 | 117 | 12.5 | 76 | 8.1 | 25 | 54.3 |
| 1989 | 117 | 12.7 | 76 | 8.3 | 22 | 45.9 |
| 1990 | 124 | 14.6 | 72 | 8.5 | 35 | 82.5 |

*Rate per 100,000 persons ages 15 - 24 years.

*Source*: Indiana State Department of Health.

The suicide rate for Hoosier young people ages 15 to 19 was 11.2 per 100,000 in 1989 and 11.9 per 100,000 in 1990. Since 1984, when the rate was 8.3 per 100,000, suicide rates have shown an annual change upward. Among 15- to 24-year-olds, the suicide rate rose from 10.7 per 100,000 in 1984, to 14.6 in 1990.[19]

The Indiana Student Health Survey (1992) revealed that suicide is a far broader issue among Hoosier young people:

- 30% of 9th-grade students (40% of the females and 20% of the males) reported strongly considering attempting suicide in the previous year. The corresponding figure for 12th-grade students was 27% (29% of the females and 24% of the males).
- A smaller number of both 9th-graders (20%) and 12th-graders (16%) reported having made a plan for attempt-

ing suicide. More females than males at both grade levels reported planning for suicide attempts.

- 9% of the 9th-graders (14% of the females and 5% of the males) reported actually attempting suicide one or more times in the previous year. Among 12th-graders, 5% (7% of the females and 4% of the males) reported attempted suicide.[20]

Indiana has adopted the national health goal for the year 2000 of reducing the suicide rate among 15- to 19-year-olds to 8.2 per 100,000. Progress to date is not encouraging. The Maternal and Child Health Division of the Indiana State Department of Health has hired a full-time consultant to help address the issue of adolescent suicide in the state; in addition, the Division is funding 19 suicide-prevention programs through "Students With a Future" minigrants.

## Youth Homicide

### National trends

Between 1987 and 1989 an alarming jump in homicide rates took place among the nation's older adolescents, ages 15 to 19. So great was the increase, that the American Medical Association declared firearm homicide to be an epidemic and devoted the June 1992 issue of their journal to discussing this issue. African-American males had the highest homicide rates, followed, in turn, by white males, African-American females, and white females. Youths in all race/gender subgroups living in metropolitan counties had many times higher firearm homicide rates than youths living in nonmetropolitan counties. The increase in firearm homicides was accompanied by a decline in non-firearm homicide rates for the period 1979 through 1989, most notable in the metropolitan counties. These trends clearly reflect the growing peril from firearms in the lives of American young people.

### Trends in Indiana

Homicide data for Indiana young people are reported for 15- to 24-year-olds. The same upward trend between 1987 and 1989 reported for the nation may be found in the homicide death rates for young Hoosiers (Table 13.6). Homicide accounted for 10% of all deaths of 15- to 24-year-olds making it the fourth highest cause of death in this age group (Table

1.13d). Twenty Hoosier children under age 15 were homicide victims in 1989 (Table 13.7), and 19 were victims in 1990. As is true for the nation, homicide rates in Indiana are highest among nonwhite males (82.5 per 100,000 in 1990 vs. 8.5 per 100,000 among all youths in this age group).[21]

**Table 13.7 Homicide Deaths Among Indiana Children and Young Adults, by Race, Gender, and Age Group, 1989**

| | Age (in years) | | | |
|---|---|---|---|---|
| **Race and Gender** | **Under 1** | **1 - 4** | **5 - 14** | **15 - 24** |
| White males | 1 | 3 | 2 | 31 |
| White females | 3 | 2 | 5 | 17 |
| Nonwhite males | 1 | 2 | 1 | 22 |
| Nonwhite females | 0 | 0 | 0 | 6 |
| **Total** | **5** | **7** | **8** | **76** |

*Source*: Indiana State Department of Health.

## Carrying weapons

The threat of violence is a daily experience for many young Hoosiers. About one in four students carries a weapon with some regularity. Responding to the Indiana Student Health Survey, 29% of the 9th-graders and 25% of the 12th-graders reported carrying a weapon during the 30 days prior to the survey. Most often, the weapons carried were knives or razors (13% for 9th-graders; 9% for 12th-graders) and guns of different types (11% for 9th-graders; 10% for 12th-graders).[22] These figures become even more disturbing in light of the numbers of young people who report getting into fights.

## Physical fighting

The Indiana Student Health Survey also asked about physical fighting. Among 9th-graders, 46% had been involved in a physical fight one or more times during the previous year; 5% had sustained injuries serious enough to require treatment by a doctor or nurse one or more times. For 12th-graders, the figures were slightly lower: 34% had been involved in a physical fight in the previous year, and 3% had required medical treatment for injuries sustained in these fights.[23]

# Summary

Much remains unknown about high-risk behavior among Indiana's young people. Information from periodic administrations of the Youth Risk Behaviors Survey will help fill gaps in our knowledge about some of the linkages among risk behaviors. It is beyond the scope of this ongoing study, however, to examine the impact of the presence or absence of family, school, and community supports on behavior. Although advantaged or financially secure young people often choose to engage in high-risk behaviors, other adolescents spend their lives in circumstances that present almost insurmountable odds against healthy choices. Yet many of them do surmount the odds and become effective parents and productive members of their communities. It is these resilient young people about whom we need to know much more.

## Notes

1. Congress of the United States, Office of Technology Assessment, *Adolescent Health—Vol. II: Background and the Effectiveness of Selected Prevention and Treatment Services* (Washington, DC: U.S. Government Printing Office, November 1991), p. 118.

2. U.S. Congress, OTA, *Adolescent Health*, Vol. II, p. 118.

3. Information supplied by the Indiana State Department of Health; Public Health Statistics Division.

4. U.S. Congress, OTA, *Adolescent Health*, Vol. II, p. 122.

5. E. A. Alexander, K. J. Kallail, J. P. Burdsal, and D. L. Ege. "Multifactorial Causes of Adolescent Driver Accidents: Investigation of Time as a Major Variable," *Journal of Adolescent Health Care*, 11, 5 (September 1990), pp. 413-417.

6. Northwestern National Life, *The NWNL State Health Rankings*, 1992 edition (Minneapolis: Northwestern National Life, 1992). Four other states—Maine, Ohio, Virginia, and Wisconsin—held the same rank in 1990. With rates of 1.3 deaths per million miles driven, Massachusetts and Rhode Island had the best records. The death rate in Nevada, the state with the worst record, was twice as high as in Indiana (3.6 deaths per million miles driven). These data were drawn from *Accident Facts*, 1991 Edition, compiled by the National Safety Council.

Fatality rate statistics vary with the data base used and the methodology used to compute the basic miles driven. According to the Indiana State Police database, Indiana's fatality rate was 2.4 per million miles driven.

7. Data supplied by the Indiana Department of Transportation.

8. Cited in L.S. Robertson and P. L. Zador, "Driver Education and Fatal Crash Involvement of Teenaged Drivers," *American Journal of Public Health*, 68, 10 (October 1978), pp. 959-965.

9. Robertson and Zador, "Driver Education and Fatal Crash Involvement."

10. The National Committee for Injury Prevention and Control, *Injury*

*Prevention: Meeting the Challenge* (New York: Oxford University Press, 1989). Supplement to the *American Journal of Preventive Medicine*, 5, 3 (1989), p. 133.

11. The National Committee for Injury Prevention and Control, *Injury Prevention: Meeting the Challenge*.

12. Cited in "Buckle up the Children," *Indianapolis News*, January 11, 1993, A-4; T. L. Chorba and T. M. Klein, "Increases in Crash Involvement and Fatalities Among Motor Vehicle Occupants Younger Than 5 Years Old," *Pediatrics*, 91, 5 (May 1993), pp. 897-901.

13. A. Fleming, (ed.), "Teenagers: Fatality Facts 1991" (Arlington, VA: Insurance Institute for Highway Safety, 1991). The information is based on an analysis of data from the U.S. Department of Transportation's fatal accident reporting system.

14. U.S. Congress, OTA, *Adolescent Health*, Vol. II, p. 122.

15. Data on driving under the influence supplied by Project I-STAR, Indianapolis.

16. Alcohol, Drug Abuse, and Mental Health Administration, *Report of the Secretary's Task Force on Youth Suicide. Vol. 2: Risk Factors for Youth Suicide*. DHHS Pub. No. (ADM)89-1622. (Washington, DC: Superintendent of Documents, U.S. Government Printing Office, 1989).

17. P. Gibson, "Gay Male and Lesbian Youth Suicide," in Alcohol, Drug Abuse, and Mental Health Administration, *Report of the Secretary's Task Force on Youth Suicide. Vol. 3: Prevention and Interventions in Youth Suicide*. DHHS Pub. No. (ADM)89-1623 (Washington, DC: U.S. Government Printing Office, 1989), pp. 3-11.

18. U.S. Congress, OTA, *Adolescent Health*, Vol. II, p. 439.

19. Indiana State Department of Health, Public Health Statistics, 1992.

20. N. T. Ellis and M. R. Torabi, *The Indiana Student Health Survey* (Indianapolis: The Indiana Department of Education, 1992).

21. Indiana State Department of Health, Public Health Statistics, 1992.

22. Ellis and Torabi, *The Indiana Student Health Survey*.

23. Ellis and Torabi, *The Indiana Student Health Survey*.

# Appendices

- Step Ahead
- Terms Used in This Report
- County-Level Data Tables

BEST COPY AVAILABLE

# Step Ahead*

## Indiana's Challenge

Fragmented services are a pervasive problem based in the historical response of federal, state and local governments to needs they identify by establishing a program to meet that need. Each program is accompanied by rules and regulations establishing requirements and restrictions. As programs accumulate over time, families seeking services find it more and more difficult to navigate their way through the maze of providers and service delivery systems. Multiple case workers serve a given family or individual, and services overlap and duplicate, leaving gaps in other areas. This situation is worsened by the fact that those most in need of services are the least able to navigate their way through the maze of agencies, service providers and systems.

Indiana children and families, like those in most other states, are victims of this fragmented service delivery system—only Indiana's problems are worse. In 1988, the Indiana Legislative Services Agency cited Indiana as having the most fragmented services for children of any state in the nation. One Indiana family leaving the hospital with a handicapped child reported making fifty-two phone calls before finding services for their child.

## Step Ahead

In 1991, Governor Bayh responded by proposing Step Ahead, an initiative to provide comprehensive services for families and children and eliminate the fragmentation, duplication and gaps in service.

Step Ahead places decision-making with those closest to children and families at the local level. It invites counties to participate in a process to coordinate resources and services and to collaborate in planning and implementation in order to provide comprehensive services for families and children. Step Ahead provides planning dollars to counties so they can assess the needs of their families and children and submit a plan addressing those needs to the state. Although participation is voluntary, all ninety-two counties embraced Step Ahead during the first nine months.

---

*This material describing the Indiana Step Ahead process was supplied by Step Ahead, 402 West Washington Street, Room W-386, Indianapolis, IN 46204-2739.

The state will respond to those plans through interagency collaboration and coordination by combining funding streams, eliminating red tape and marshalling as many resources as possible to assist counties in implementing their plans.

As counties develop their Step Ahead plans, they will address the needs of families to access a seamless network of affordable comprehensive services ranging from prenatal care to job training for parents seeking employment; from infant care to school-age child care; from early intervention for children with special needs to preschool; from immunizations to lead screening.

## The Step Ahead Process

The extensive collaboration that must occur in order for Step Ahead to provide these services to families requires time to assess the needs, a commitment to families by all levels of government, a forum for local communities to develop a comprehensive plan and a governance structure that ensures fairness.

### Local convening:

In order to participate in Step Ahead, one of four local entities (the local schools, United Way, the county extension agent, or the Community Action Program) convenes a broadly representative local group that must include county health departments, local coordinating councils for special needs children, Head Start, Private Industry Councils, public schools and WIC clinics. Local conveners are also encouraged to invite representatives of thirty-five other entities, ranging from Child Protective Services and universities to consumers.

### Local needs assessment and plan:

The local convening group selects a Step Ahead Council, which in turn designates a fiscal agent and a county coordinator. Once the Council notifies the state that a coordinator and fiscal agent have been named, the county is eligible to receive planning funds.

The coordinator, using state funds at the Council's direction, conducts a needs assessment and develops a plan of action for addressing those needs.

## State role:

The state responds to the plan through the Kitchen Cabinet, composed of representatives of all agencies providing services to families and children. It is the responsibility of this group to review each plan and coordinate in order to provide resources to counties to implement their plans.

## State convening:

Just as local leaders convene in local Step Ahead Councils, state agency heads convene in order to facilitate the state's response to local needs. The State Convening Group must assume leadership in removing barriers to collaboration, coordinating resources and overcoming turf issues.

## Governance:

Step Ahead is governed by the Step Ahead Panel, established by statute and appointed by the governor and superintendent of public instruction. The governor appoints the chairperson, five members from the private sector and six members representing various state agencies. The superintendent appoints four members. The Panel is responsible for policy and fiscal decisions.

An Advisory Council consisting of professionals, providers and consumers advises the Step Ahead Panel.

## Partnerships:

Already unique and exciting partnerships are being forged to provide services for children and families: public television is working with Step Ahead to provide training to family day care providers; through cooperation with the Department of Corrections, inmates will upgrade playgrounds in child care centers to improve safety for children, and women inmates are making dolls that will be distributed to low-income children in child care centers.

Recognizing that Step Ahead is one of the governor's top priorities, agencies are creatively supporting Step Ahead. The Department of Workforce Development is providing training dollars to upgrade the skills of child care workers. Drug education dollars are funding start-up costs for school-age child learning partnerships to assist with training child care workers and providing parents with parenting information. Step Ahead is entering into an interagency agreement with the Indiana State Department of Health to help educate parents about the need for age-appropriate immunizations. The Department of Corrections is providing inmates with parenting education classes. The Department of Commerce is coordinating efforts with Step Ahead to provide local Step Ahead Councils with funds to build centers that provide comprehensive services.

# WHAT IS STEP AHEAD?

Mission Statement: To provide a statewide comprehensive seamless service delivery system to children birth to thirteen in the State of Indiana, ensuring its accessibility, affordability, and quality.

To develop incentives and resources for the development of collaborative service networks that will increase efficiency and diminish redundancy and eliminate gaps in service.

Step Ahead is a process that facilitates the development of a county-wide service delivery system. The delivery system provides a bridge from service to service for children and families in an attempt to fill gaps in delivery. Networks will provide children and families uninterrupted, integrated, holistic services. The Step Ahead delivery system will develop strategies to access new funding dollars as well as current funding dollars. Step Ahead also strives to enhance and expand existing programs to strengthen them.

# WHAT DOES IT LOOK LIKE?

**Phase One:** A diverse group of people, who care about children and families, come together to struggle with the concept of Step Ahead and the collaborative process.

**Phase Two:** A process for problem solving and decision making evolves. The result is the selection of a Coordinator and Fiscal Agent.

**Phase Three:** The local Step Ahead council applies for the planning dollars to initiate the Needs Assessment and the Plan of Action. Although one or more individuals writes the grant application, all members have an opportunity to review and approve the final application. The decision making process should be by consensus.

**Phase Four:** The Coordinator facilitates and works for the local Step Ahead council implementing the Needs Assessment and developing the Plan of Action. The coordinator spearheads the larger Step Ahead body. The Fiscal agent serves as the fiscal controller as determined by the planning grant budget. Some counties may choose to select a Chairperson to continue to convene the council. Any and all key players may contribute current data for the Needs Assessment component task committees by selecting members from the larger Step Ahead council. Access to the process and information is readily available to all.

**Phase Five:** The Coordinator works with the local Step Ahead council to analyze the results of the Needs Assessment. The results of this analysis are used to develop the county Plan of Action. Throughout the process, key players are involved and actively participate at some level. The final Plan of Action is approved by the local Step Ahead Council.

**Phase Six:** The local Step Ahead council uses the Plan of Action as a road map for service delivery. Funding requests evolve from the Plan of Action. During implementation, the roles of the Coordinator and/or Fiscal Agent continue or merge per county design. Responsibilities for these positions will be defined in the terms of monitoring and accountability. The local Step Ahead Council serves as the governing body for accountability and service efficiency. The Plan of Action is reviewed periodically for the purpose of clarification in direction as well as revision.

## OVERVIEW

Many local Step Ahead councils have developed a formal council with bylaws, membership guidelines, and subcommittees. Other councils remain informal. This is the result of county design. All Step Ahead Council actions continuously evaluate the availability of new dollars generated through the state Step Ahead process. The local Step Ahead Council pursues and applies for resources according to the goals, objectives, and strategies outlined in the county plan of Action. Once granted, Step Ahead dollars are sent from the State to the identified Fiscal Agent. The Fiscal Agent disburses those funds as defined in the Plan of Action and subsequent grants. Ongoing services continue to be monitored for efficiency and quality.

# Terms Used in this Report

**Abuse** - The 1974 federal Child Abuse Prevention and Treatment Act defined child abuse as "the physical or mental injury, sexual abuse, negligent treatment, or maltreatment of a child under the age of eighteen by a person who is responsible for the child's welfare under circumstances which would indicate that the child's health or welfare is harmed or threatened thereby." The National Committee for Prevention of Child Abuse recognizes four distinct types of child maltreatment: *physical abuse*, *neglect*, *sexual abuse*, and *emotional maltreatment*.

*Institutional abuse and neglect* is that which takes place in a facility that is responsible for the health and well-being of children who are there temporarily, for part of a day (e.g., school or day care center) or routinely (in an institution providing 24-hour care).

- When suspected cases of child maltreatment come to the attention of authorities, they are catalogued as *reported cases*.

Following investigation by child-protection service workers, reported cases are classified as *substantiated*, *indicated*, *or unsubstantiated*.

- For the past several years, slightly more than half of the reported cases have been found to be substantiated or indicated cases of maltreatment. Authorities caution about the use of these statistics as true indicators of the maltreatment of Hoosier children; although reporting has improved in the past decade, many cases still remain unreported In some instances there are insufficient resources available to investigate reported cases thoroughly.

**Adolescent/teen pregnancy** - Pregnancy occurring among women under age 20.

**Advantaged urban community** - A category used in the analysis of data from the National Assessment of Educational Progress (NAEP) to refer to students who live in metropolitan statistical areas and who attend schools where a high proportion of the students' parents are in professional or managerial positions.

**African-American** - A term of self-identification adopted by many Americans of African descent. As used in this report, African-American is synonymous with the category "Black" used by the

U.S. Bureau of the Census. The Census Bureau generally classifies an individual as Black if s/he has an African-American parent.

**Aid to Families with Dependent Children**; also referred to as Assistance to Families with Dependent Children (AFDC) - A program providing cash assistance to very low-income families with children; financial eligibility is determined by the number of eligible family members and their total income; maximum benefit levels are set by each state.

**American College Test (ACT)** - A college entrance examination taken by high school students; relatively few Hoosier students take this examination.

**Armed Forces Qualifying Test (AFQT)** - A measure of reading, writing, and mathematics achievement embedded in the Armed Services Vocational Aptitude Battery, a test administered to all applicants and enlistees for the United States armed forces.

**Asian-American** - A person having origins in any of the oriental peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

**At risk** - Any student who runs the risk of not acquiring the knowledge, skills, and attitudes needed to become a productive adult. One recent national study found that one in four American students are "at risk." Indicators of risk may include underdeveloped language skills, drug and alcohol abuse, disruptive and/or delinquent behavior, inattentiveness, chronically withdrawn behavior, excessive school absence, dropping out of school, and low academic achievement. Additional risk factors include being overage for grade level and low educational attainment of parents.

**Average/mean** - The arithmetic mean, or average, is a statistical measure defined as the sum of scores or values divided by the total number of cases involved.

**Baby boomer** - Large cohort of Americans born between 1946 and 1964. The cohort is now between the ages of 29 and 47.

**Binge-drinking** - Consuming at least five alcoholic drinks at a sitting (approximately the amount needed to raise a person's blood alcohol to about 0.10%). In the studies on alcohol use, students are asked to report any such binge-drinking behavior that occurred within two weeks prior to the study.

**Birthrate** - The birthrate is the number of births per year per 1000 women of childbearing age, traditionally set at ages 15-44. Age-specific birthrates refer to the annual number of births per 1000 women in a specific age group. The teen birthrate, for example, refers to births per 1000 women under the age of 20 that occurred in a given year.

**Blood Alcohol Concentration (BAC)** - The proportion of alcohol in an individual's blood following consumption of alcoholic beverage or other source. Blood alcohol concentrations are measured as percentages; a concentration in excess of 0.10% is considered the legal definition of intoxication in Indiana and many other states. Concentrations of 0.10% or higher result in impairment of vision, perception, judgment, reaction time, and ability to brake and control speed when operating a vehicle.

**Blood lead concentration** - The proportion of lead in an individual's blood following exposure to lead from such environmental sources as vehicular emissions in the air, water flowing through lead pipes, paint dust in older homes, and others. Research is demonstrating that even slightly elevated blood lead concentrations are a threat to child health and that high levels of lead toxicity can lead to coma, convulsions, profound and irreversible mental retardation, and even death. Blood lead concentrations are measured in micrograms per deciliter. Concentrations in excess of 10 micrograms per deciliter are considered toxic.

**Blueprints for Healthy Development** - A series of ten goals for the development of Indiana's young people. The goals were generated by the participants in a statewide conference convened by the Indiana Youth Institute in 1990.

**Boomer echo/"boomlet"** - The relatively large birth cohort of the children of the baby boomers; the "boomlet" ended in about 1990 when the boomers began to age beyond the child-bearing period.

**Caseload** - Number of individuals or families for which a caseworker is actively providing services. The Child Welfare League of America, the standard-setting body for American child welfare agencies, has set at 17 the number of active cases that a child protection or child welfare caseworker should be carrying at any given time. In Indiana, active caseloads often reach 70 to 90 or higher. The recent consent decree signed by the Indiana and Marion County Family Social Service Administrations contained a stipulation that active caseloads be reduced to no more than 25.

**Caseworker** - A person in the social work field who is assigned to help better the social conditions of individuals and/or families. These professionals include child welfare caseworkers and child protection workers whose duties include investigating reported cases of abuse and neglect. A newer term, family preservation workers, applies to caseworkers who provide intensive intervention services to troubled families.

**Central states region** - States in the upper midwest region. The states included vary according to definitions created by various reporting agencies. In this report, comparative data have been provided for Indiana and the four contiguous states of Illinois, Kentucky, Michigan, and Ohio. Where other states are included in the discussion of a region, they have been listed in an endnote.

**Child** - As used by the U.S. Census Bureau, a child is a person under the age of 18. There are instances in this report where the terms "children and adolescents" have been used to remind readers that the reference includes teens.

**Children/Families of color** - In this report, used to designate members of nonwhite racial groups identified by the U.S. census and Hispanics/Latinos.

**Cohort** - A group of people who have a statistical factor in common, such as being born in or around the same year (*see also* Baby Boomers).

**Compensatory program** - A program of services directed to children who—for reasons of family poverty or other circumstances, or because they themselves have disabling physical or mental conditions—are not developing physically or cognitively or are not making education progress according to norms established for their age groups.

**Comprehensive Test of Basic Skills** - A nationally-normed achievement test embedded in the examination used for the Indiana Statewide Test of Educational Progress (ISTEP).

**Corporal punishment** - The intentional infliction of physical punishment as a form of discipline. Indiana law still permits the corporal punishment of children in schools, state-licensed group homes, child-caring institutions, and foster homes. Corporal punishment is not allowed in prisons, the military, or in mental hospitals.

**Death rate** - The number of deaths per 100,000 population; the age-specific death rate is the number of deaths per 100,000 persons in that age group.

**Demographics** - The descriptive study of human populations.

**Disabled** - *see* Persons with disabilities.

**Disadvantaged urban community** - Students living in metropolitan statistical areas and who attend schools where a large proportion of the students' parents are receiving welfare or are unemployed. The designation is used in the analysis of data from the National Assessment of Educational Progress (NAEP).

**Driving under the influence (DUI)** - Operating a motor vehicle, including a motorcycle, with a blood alcohol concentration (BAC) of 0.10% or higher.

**Dropout rate** - The *annual dropout rate* measures the proportion of students in grades 7 to 12 who drop out of school in a given school year without completing high school. Annual rates reveal how many students are leaving each year. Each year's rate may be compared with previous ones. *Status dropout rates* measure, at a point in time, the proportion of a population that has not completed high school and are not enrolled, regardless of when they dropped out. The status rate shows the cumulative impact of annual dropout rates on an entire population. In this report, educational attainment statistics are based on status rates. *Cohort rates* measure what happens to a single group of students over a period of time. For example, the four-year graduation rate measures what happens to the group of students who entered grade 9 and then graduate four years later.

**Dropout** - A student in grades 7 to 12 who leaves school before graduation without transferring to another school or institution. Dropouts include students who fail to return to school following expulsion when eligible; students who transfer to adult programs, technical schools, GED programs, or a program not leading to a high-school diploma; Amish students who leave school before high-school graduation; students who are incarcerated in adult institutions. Students who suffer from prolonged illness or die, suspended students, and students who transfer to another institution with an education program leading to a high-school diploma are *not* dropouts.

**Drug Use Forecasting Program** - A national system for tracking trends in drug use in the United States arrestee population. Instituted in 1987 by the National Institute of Justice in cooperation with the Bureau of Justice Assistance, the system is currently operational in 24 cities. Data are collected from anonymous arrestee volunteers via administration of structured questionnaires and analysis of urine specimens for the presence of 10 drugs.

**Early Periodic Screening and Diagnostic Testing (EPSDT)** - *See* HealthWatch Services.

**Early adolescents** - Individuals from the ages of 10 to 15 or in grades 5 through 9.

**Economics** - The social science that deals with the production, distribution, exchange and consumption of goods and services.

**Entitlement programs** - Federal programs, such as Social Security, Medicaid, Aid to Families with Dependent Children (AFDC), and Food Stamps available to all persons who meet their eligibility requirements. To be eligible for *means-tested entitlements*, persons must meet certain income or "means" criteria.

**Essential Skills Standards** - A set of standards based on what students should know at various points in their academic careers; standards were adopted in December 1991 and implemented during the 1991-1992 school year. Essential skills were defined by master teachers from around the state.

**Ethnic group** - A segment of a society whose members themselves and/or others view as sharing a common origin and important cultural characteristics such as language or national background. Ethnic groups may include racial groups.

**Family support services; also referred to as home-based, family-centered services** - An intensive set of support services provided to a troubled family on a 24-hour basis by skilled professionals.

**Family** - The Census Bureau defines a family as two or more persons related by blood, marriage, or adoption, who live in the same dwelling unit.

**Fetal Alcohol Syndrome** - A complex of defects among infants exposed to alcohol during pregnancy; these defects include growth retardation, facial malformations, and central nervous system dysfunction, including mental retardation.

**Fetal death** - A spontaneous death to a fetus before birth; includes stillbirth.

**Fiscal year (FY)** - The yearly accounting period for a government or agency. The fiscal year for the state of Indiana begins on July 1 and ends on June 30 The fiscal year for the federal government begins on October 1 and ends on September 30. The fiscal year is designated by the year in which it ends (e.g., Indiana FY 1993 began on July 1, 1992 and will end on June 30, 1993).

**Food Stamp Program** - A federal program designed to raise the nutritional level of low-income households by providing coupons for food items; coupons may be used at any retail establishment federally approved to participate in the program.

**Gateway examination** - A key element in the proposed workforce development strategies being planned for Hoosier high-school students; the gateway exam will be a statewide examination administered to students in grade 10. It will be used as the basis for an individual career plan. Students ages 16 and 17 will have to pass this examination to gain permission to drop out prior to high-school graduation.

**General educational development (GED) test** - An examination administered by the American Council on Education as the basis for awarding high-school equivalent certification.

**Graduation Rate** - Four-year cohort rate refers to the percentage of students who have entered grade 9 and graduate at the end of four years.

**Half-orphanage** - An institution that admitted children with one living parent but who were in need of care; this term fell out of use early in the 20th century.

**Head Start** - A federally-funded program of compensatory education for preschool children.

**Head of household** - The individual so designated by the person completing the U.S. Census report; generally, the head of household is the primary breadwinner in the family.

**HealthWatch Services** - The name by which the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services are known in Indiana. EPSDT offers a comprehensive set of periodic health screening, immunization, and referral services for low-income families; services are available to children from birth up to the age of 21.

**Hispanic/Latino** -Designation for persons of Mexican, Puerto Rican, Cuban, Central or South American, or, other Spanish cultural origin. Not a racial designation.

**HIV Positive** - An individual who has been tested and found to be infected with the Human Immunodeficiency Virus (HIV), the virus that causes AIDS; infected individuals may remain "HIV Positive" for an indeterminate number of years before contracting the symptoms of full-blown AIDs.

**Home-based school/home-schooling** - An educational option chosen by parents who remove their youngsters from formal classroom settings and teach them at home. Parents who choose this option must meet established educational criteria to ensure that children being taught at home are receiving an education equivalent to that offered by the public schools.

**Household** - The U.S. Census bureau defines a household as all the persons living within a single dwelling unit. Dwelling units include houses, apartments, mobile homes, a group of rooms, or a single room occupied as separate living quarters. Thus, a family may constitute a household (family household), but not all households comprise families. Household counts also include nonrelated individuals and individuals living alone (nonfamily households). Individuals *not in households* include those living in group quarters such as correctional facilities, hospitals, nursing homes, group homes, college dormitories, emergency shelters, and juvenile institutions.

**Incidence** - A term used to describe the number of cases of disease, infection, or some other event having its onset during a prescribed period of time, in relation to the unit of population in which the events occur. For example, the incidence of mumps occurring in a school during

January would be the number of cases of mumps reported during January in that school.

**Inclusion** - The process whereby students requiring special education services attend their neighborhood schools and are served in age-appropriate, general education settings. Inclusion *assumes* that children will be served in general education settings. *Compare with* Mainstreaming.

**Indian** - *See* Native American.

**Indiana Statewide Testing for Educational Progress (ISTEP)** - Examinations given to students in Indiana schools since 1987. In 1992, students in grades 2, 3, 6, 8, and 9 took the examination.

**Indicator** - A concrete (usually numerical) representation of an abstract variable. The infant-mortality rate is an indicator of the well-being of children up to the age of one year.

**Infant-mortality rate** - Annual rate based on number of deaths per 1000 live births among children younger than one year of age.

**Injury** - Injuries are broadly classified as accidental (or unintentional) and intentional (those incurred in the course of an assault or suicide attempt). Accidental injuries are more common than intentional injuries.

**Labor force** - Includes all individuals age 14 and older who are employed as civilians or in the armed services, or are actively seeking employment at the time of the weekly survey. A *year-round, full-time worker* is one who worked for 50 weeks (2000 hours) or more during the preceding calendar year. (*See also* Workforce).

**Leading cause of death** - A cause of 10 or more fatalities in a specific age group within a given year.

**Low birth weight** - A weight at birth of less than 2500 grams.

**Mainstreaming** - A concept of delivery of services to persons with disabilities in the "least restrictive environment." Although variously interpreted, in Indiana, mainstreaming involved partnerships between regular and special educators and assumed students would be placed in special education classes and enrolled in general education classes and activities *whenever possible*. Mainstreaming has been replaced with inclusion (*see* Inclusion).

**Manufacturing sector** - A classification of industries that includes nondurable goods such as food and kindred, textile mills, apparel and other textile, paper and allied, chemical and allied, petroleum and coal, rubber and miscellaneous plastics, leather and leather goods industries, and tobacco manufacturers. Also included are durable goods such as lumber and wood, furniture and fixtures, primary metal, fabricated metal, machinery, electric and electronic equipment, transportation equipment, motor vehicles and equipment, stone, clay, and glass, and instruments and related products industries.

**Median** - A measure used to describe the middle of a distribution of values. The median divides any set of values into equal groups, half less than and half more than the median.

**Medicaid** - A medical assistance program that pays for approved and needed medical care for persons meeting eligibility requirements. The Medicaid program is administered by the Division of Family and Children of the Indiana Family and Social Services Administration. Many services must be approved for payment by the county office before the services can be obtained. Medicaid providers are reimbursed through a combination of federal and state funding.

**Metropolitan Statistical Area (MSA)** - A metropolitan region comprising one or more counties containing either a place with at least 50,000 inhabitants or an urbanized area and a metro area with total population of at least 100,000. Contiguous counties are included if they have close social and economic links with the area's population nucleus.

**Middle Grades Improvement Program (MGIP)** - A set of programs, supported by Lilly Endowment, designed to improve the educational progress of Hoosier students in grades 5 through 9.

**Minimum wage** - A federally mandated, minimum hourly payment for work performed. The current minimum wage is $4.25 per hour. Young people under the age of 20 may be paid a training wage of $3.35 per hour for up to 90 days.

**Minority group** - In this report the term follows usage in U.S. Census reports; it includes nonwhite racial groups, as well as Hispanics/Latinos.

**Morbidity** - The ratio of sick to well persons in a given population (such as a county, state, or nation). Usually morbidity statistics are reported for specific diseases.

**National Assessment of Educational Progress (NAEP)** - A process for monitoring the academic achievement of American elementary and secondary students; mandated by Congress in 1969 and conducted periodically since. In 1990, states were given the option of participating on a voluntary basis in the mathematics Trial State Assessment Program for 8th-graders.

**National health objectives** - A set of some 300 objectives for improving American health standards outlined in the document, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, produced through a national effort involving working groups of health professionals, the health departments of all 50 states and more than 300 national organizations. The work was spearheaded by the U.S. Public Health Service, which published the report in 1991. Indiana has adopted the challenge of meeting the national health objectives by the year 2000.

**National Education Longitudinal Study (NELS:88)** - A longitudinal study of 8th-graders conducted for the National Center for Education Statistics and begun in 1988. The participants will be restudied every two years until they enter young adulthood. This study follows longitudinal studies of high-school seniors begun in 1972 and the High School & Beyond Study of 10th- and 12th-graders begun in 1980.

**National Education Goals** - A set of six broad goals established by the 50 state governors at the national education summit held in September 1989. The goals are to be achieved by the year 2000.

**Native American** - A person having origins in any of the original peoples of North America and maintaining cultural identification through tribal affiliation or community recognition.

**Near poor** - Individuals living in households with incomes that exceed the federal poverty level, yet leave them eligible for safety-net programs such as food stamps and reduced-price school lunch, etc. Although eligibility levels vary according to program, none exceed 200% of the federal poverty level.

**Neonatal mortality rate** - Annual rate of deaths per 1000 live births occurring among infants under the age of 28 days.

**Normal curve equivalent (NCE)** - A statistically derived score that allows meaningful comparisons among different tests within the same test battery. NCEs are represented on a scale of 1 to 99 with a mean of 50 and a standard deviation of approximately 21. Unlike percentiles, NCE scores may be averaged and used to compare the performance of one group with another. For example, if a school's mean NCE on the ISTEP reading test is 53 and on the ISTEP mathematics test is 45, it is correct to say that the reading score is eight points higher than the mathematics score.

**Odds-ratios** - A comparison of the likelihood that an event will take place in two populations; for example, a comparison of male and female 8th-graders showed that females were 0.81 times as likely to drop out of school as were males.

**Office of Management and Budget (OMB)** - A federal agency that prepares the president's annual budget. Additional functions include working with the Council of Economic Advisors and the Treasury Department to develop the federal government's fiscal program, overseeing administration of the budget, reviewing government regulations, and setting the annual federal poverty level.

**Office of Technology Assessment (OTA)** - A federal agency that provides Congress with information and analyses related to the political, physical, economic, and social effects of technological applications.

**Peer group** - A group of individuals of similar status, such as age or socioeconomic status.

**Per capita** - Literally, per head; used to describe a rate of occurrence of a phenomenon per individuals in a population.

**Perpetrator** - Individual who has committed an offense.

**Persons with disabilities (handicapping conditions)** - People who have been evaluated and shown to have impairments that affect educational performance and require special education and related services. Impairments include deafness, deafness-blindness, hearing problems, mental retardation, orthopedic problems, serious emotional disturbance, specific learning disabilities, speech problems, visual problems, multiple handicaps, and other chronic health problems.

**Poor** - Individuals living in households with incomes that are less than the federal poverty level.

**Poverty level** - A money income threshold set by the U.S. Office of Management and Budget. Poverty levels vary by family size and composition; annual adjustments reflect changes in the Consumer Price Index but do not take into account regional differences in cost of living or available forms of noncash benefits such as food stamps and Medicaid.

**Poverty rate** - The percentages of individuals living in households where incomes are less than the poverty level.

**Premature birth** - A birth occurring before the 37th gestational week.

**Prenatal care** - Care given to a pregnant woman; first trimester care refers to care received during the first three months of pregnancy.

**Prenatal Substance Use Prevention Program (PSUPP)** - A prevention program funded by the Indiana Department of Public Health to encourage pregnant women to eliminate or decrease use of alcohol, tobacco, or other drugs during pregnancy. The program includes public education about possible hazards to a fetus from these substances and training to increase the capacity of health professionals to identify women at high risk. The program also refers clients for treatment services and follow-up.

**Preterm** - *See* Premature Birth; *compare with* Small for Date.

**Prevalence** - The number of cases of disease, infected persons, or persons with some other attribute present at a particular time and in relation to the size of the population from which it is drawn. For example, when talking about drug use, *lifetime prevalence* refers to the percentage of respondents in an age group that report ever using the drug in their lifetime.

**Race, racial group** - An ethnic group to which members are assigned on the basis of biological characteristics. In this report, the following terms have been used (the U.S. Census Bureau categories are in parentheses): African-American (Black); Native American (American Indian and Alaskan Native); Asian-American (Asian and Pacific Islander); and White. Hispanics/Latinos (Hispanic Origin) may be of any race.

**Rate** - The number of instances of a phenomenon in a population of a given size.

**Rateable reduction** - Each state sets a standard of need for households receiving benefits from Aid to Families with Dependent Children. States are permitted to reduce actual payments by applying a rateable reduction to the standard of need. In Indiana, the rateable reduction is 10%.

**Rural** - A term used by the U.S. Census Bureau to designated areas *outside* those designated as metropolitan or urban (*i.e.*, having 2,500 or more inhabitants). A few incorporated places contain extensive areas of low population density and are referred to as "extended cities." The extended portion of each is also considered as rural for census purposes.

**Safety-net** - The network of supportive financial and social services available to low-income families and families with special-needs children.

**Scholastic Aptitude Test (SAT)** - An examination administered by the Educational Testing Service and used to predict the facility with which an individual will progress in learning college-level academic subjects. The SAT was taken by 58% of Indiana's high school graduates in 1992.

**Secretary's Commission on Achieving Necessary Skills (SCANS)** - A commission formed in 1990 by the U.S. Secretary of Labor to answer the question: "What are the skills that young people will need to make their ways in the world?" The SCANS report identified competencies in resources, interpersonal skills, information, systems, and technology. Added to a foundation of basic skills, thinking skills, and personal qualities, these competencies constitute the "workplace know-how" essential for all students entering the labor force.

**Service sector** - A classification of industries that include personal services, hotels and other lodging, private household work, business and repair, business services, auto repair and garages, amusement and recreation, motion pictures, as well as professional social, health, and legal services.

**Sexually transmitted disease (STD)** - Infections that are transmitted from person to person through sexual intercourse; there are some 50 organisms and syndromes that may be transmitted sexually. Nationally, statistics are gathered for syphilis, gonorrhea, and HIV/AIDS. Indiana also reports cases of chlamydia.

**Single-parent family** - A parent and related children living in a household without a spouse present.

**Small-for-date birth** - An infant that weighs less than 90% of infants of the same gestational age. *Compare with* Premature birth.

**Socioeconomic status (SES)** - A ranking of individuals within a society in terms of their income, occupational prestige, educational attainment, or power. Individuals with similar socioeconomic status are often referred to as a *social class*. Socioeconomic status is difficult to measure, and usually rankings are based on a composite index that includes variables such as household income, occupation(s), and educational attainment of household breadwinner(s).

**Statistical significance** - Probability that an observed difference has not occurred by chance.

**Step Ahead Initiative** - A process established by the Indiana General Assembly in 1991; Step Ahead allows each county in Indiana to build a coordinated, comprehensive system for the delivery of educational, health, and social services to children from birth to age 13. *See* Appendix A for a full description.

**Steroids** - Synthetic derivatives of the natural male hormone, testosterone; steroids are used by athletes and bodybuilders to increase lean muscle mass, strength, and endurance. Steroids are legally defined as controlled substances, and their use is prohibited by all national and international athletic governing bodies. Also called *anabolic* or *androgenic steroids*.

**Substitute care** - 24-hour care for children who can no longer remain in their own homes; state policy requires placement in the least restrictive, most family-like setting that meets the child's needs.

Out-of-home placement may be made in an approved relative home, a licensed foster home, a group home or child-caring institution or other court-approved facility. Also referred to as *out-of-home care*.

**Teen births** - Rates of births to young women under age 20; may be sub-divided into specific age groups such as ages 10-14, or 15-19.

**Termination of pregnancy** - Intentional ending of a pregnancy, resulting in the death of the fetus, at any point prior to full gestation.

**Unemployment rate** - The number of individuals who are actively seeking employment as a proportion of the total labor force.

**Urban** - An urban place is a fixed community with a population in excess of 2,500. *Urbanized areas* consist of a central place and the surrounding densely settled territory that together have a population of 50,000 or more.

**Vehicular accident** - One that occurs to the driver or a passenger in a motor vehicle (including motorcycles).

**Very low birth weight** - A weight at birth of less than 1,500 grams.

**Women, Infants and Children's Program (WIC)** - A program that provides nutritional information to pregnant and nursing women; WIC provides vouchers for food supplements.

**Work certificate** - A permit issued to young people ages 14 to 17 allowing them to work at a specific enterprise, subject to hours and safety regulations; if a youth changes jobs, the certificate covering previous employment must be surrendered and a new work certificate issued. Work certificates may be revoked if a student's academic progress is believed by school officials to be adversely affected by working.

**Workforce** - A term used to embrace all employed individuals, now and in the future. *See also* Labor force.

**Workforce development legislation** - A series of broad strategies for upgrading the workforce in Indiana; the legislation was passed by the Indiana legislature in 1992 without authorization of funds for implementation.

**Youth work** - A general designation for individuals and agencies that provide services to children, adolescents, and young adults. Youth work embraces youth development professionals who provide services to other youthworkers, as well as those who work directly with young people.

# County-level Indicators

### Demographics

A.1a Population, 1990
- Total Population
- Population < 18 Yrs.
- Population 18-64 Yrs.

A.1b Population, 1990
- Median Age
- Rank
- % < 18 Yrs.
- Rank
- Dependency Ratio(The number of individuals < age 18 and > age 65 as a percentage of the total population)
- Rank

### Economics

A.2 Labor Force Participation of Females, 1990
- With Own Children < 6 Yrs. (%)
- With Own Children 6-17 Yrs. (%)

A.3 Income/Rental Housing Costs, 1989
- Median Family Income
- Per Capita Income
- Median Gross Rent

A.4a Poverty Status (Persons), 1989
- All Persons (%)
- Related Children < 18 Yrs. (%)
- Related Children < 5 Yrs. (%)
- Related Children 5-17 Yrs. (%)

A.4b Poverty Status (Families), 1989
- % of All Families in Poverty
- % of Families With Related Children < 18 Yrs. in Poverty
- % of Families With Related Children < 5 Yrs. in Poverty

A.4c Poverty (Female Householders), 1989
- % of Female Householder Families
- % of Families With Related Children < 18 Yrs.
- % of Families With Related Children < 5 Yrs.

A.5 Students Receiving Free Lunches
- % of Students Receiving School Lunch 1990
- % of Students Receiving School Lunch 1991
- % Change 1990-91

### Abuse and Neglect

A.6a Abuse FY 1991
- Total Reports of Abuse
- Number of Substantiated & Indicated Cases
- % of Reported Cases Substantiated & Indicated

A.6b Neglect, FY 1991
- Total Reports of Neglect
- Number of Substantiated & Indicated Cases
- % of Reported Cases Substantiated & Indicated

### Education

A.7a Enrollment and Dropout rates, 1990-91
- Total Enrollment K-12
- Total Enrollment 7-12
- Dropout Rate/100 Students (Annual dropouts as a percentage of students in grades 7-12)
- Dropout Rate 4 Grade Cohort (Percentage of students who entered grade 9 who did not graduate in four years)
- % Retained in Grade

A.7b Post-graduation Plans of Students in Grade 12, 1988-89
- % Planning on 4-year Institution
- % Planning on Some Higher Education
- % Planning on Military

A.7c Educational Attainment of Persons Age 25 and Older, 1990
- High School Graduate or Higher
- Bachelor's Degree or Higher

### Health

A.8 Birth data, 1989
- Total Live Births
- Live Births to Women < 15 Yrs.
- Live Births to Women 15-19 Yrs.
- Low Birth Weight Infants (per 1000)
- Infant Mortality Rate (per 1000)

## Table A.1a Population, 1990

| Counties | Total Population | Population < 18 Yrs. | Population 18-64 Yrs. |
|---|---|---|---|
| ADAMS | 31,095 | 9,860 | 17,061 |
| ALLEN | 300,836 | 83,504 | 183,208 |
| BARTHOLOMEW | 63,657 | 16,475 | 39,850 |
| BENTON | 9,441 | 2,658 | 5,211 |
| BLACKFORD | 14,067 | 3,572 | 8,352 |
| BOONE | 38,147 | 10,437 | 22,823 |
| BROWN | 14,080 | 3,468 | 8,825 |
| CARROLL | 18,809 | 4,976 | 11,047 |
| CASS | 38,413 | 10,157 | 22,398 |
| CLARK | 87,777 | 22,549 | 54,633 |
| CLAY | 24,705 | 6,452 | 14,081 |
| CLINTON | 30,974 | 8,552 | 17,617 |
| CRAWFORD | 9,914 | 2,728 | 5,772 |
| DAVIESS | 27,533 | 7,955 | 15,170 |
| DEARBORN | 38,835 | 11,106 | 23,118 |
| DECATUR | 23,645 | 6,822 | 13,665 |
| DEKALB | 35,324 | 10,225 | 20,877 |
| DELAWARE | 119,659 | 26,415 | 78,091 |
| DUBOIS | 36,616 | 10,294 | 21,805 |
| ELKHART | 156,198 | 44,477 | 94,224 |
| FAYETTE | 26,015 | 6,903 | 15,335 |
| FLOYD | 64,404 | 17,042 | 39,151 |
| FOUNTAIN | 17,808 | 4,612 | 10,227 |
| FRANKLIN | 19,580 | 5,786 | 11,360 |
| FULTON | 18,840 | 5,016 | 10,815 |
| GIBSON | 31,913 | 8,199 | 18,690 |
| GRANT | 74,169 | 18,370 | 45,572 |
| GREENE | 30,410 | 7,729 | 17,693 |
| HAMILTON | 108,936 | 31,623 | 68,324 |
| HANCOCK | 45,527 | 12,545 | 28,234 |

Table A.1a Cont'd

| Counties | Total Population | Population < 18 Yrs. | Population 18-64 Yrs. |
|---|---|---|---|
| **DEMOGRAPHICS** | | | |
| HARRISON | 29,890 | 8,450 | 18,044 |
| HENDRICKS | 75,717 | 21,112 | 47,254 |
| HENRY | 43,139 | 11,837 | 29,187 |
| HOWARD | 80,827 | 21,542 | 49,813 |
| HUNTINGTON | 35,427 | 9,804 | 20,569 |
| JACKSON | 37,730 | 10,180 | 22,432 |
| JASPER | 24,960 | 7,173 | 14,718 |
| JAY | 21,512 | 5,700 | 12,508 |
| JEFFERSON | 29,797 | 7,455 | 18,312 |
| JENNINGS | 23,661 | 6,386 | 14,542 |
| JOHNSON | 88,109 | 23,817 | 54,936 |
| KNOX | 39,884 | 9,235 | 24,278 |
| KOSCIUSKO | 65,294 | 18,774 | 38,777 |
| LAGRANGE | 29,477 | 10,342 | 16,126 |
| LAKE | 475,594 | 133,167 | 283,748 |
| LAPORTE | 107,066 | 27,113 | 65,923 |
| LAWRENCE | 42,836 | 10,934 | 25,702 |
| MADISON | 130,669 | 32,375 | 79,962 |
| MARION | 797,159 | 203,185 | 501,153 |
| MARSHALL | 42,182 | 12,028 | 24,507 |
| MARTIN | 10,369 | 2,802 | 6,131 |
| MIAMI | 36,897 | 10,484 | 22,123 |
| MONROE | 108,978 | 20,067 | 79,635 |
| MONTGOMERY | 34,436 | 8,680 | 20,830 |
| MORGAN | 55,920 | 15,569 | 34,564 |
| NEWTON | 13,551 | 3,924 | 7,826 |
| NOBLE | 37,877 | 11,113 | 22,187 |
| OHIO | 5,315 | 1,392 | 3,179 |
| ORANGE | 18,409 | 4,922 | 10,689 |
| OWEN | 17,281 | 4,625 | 10,348 |

Table A.1a Cont'd

| Counties | Total Population | Population < 18 Yrs. | Population 18-64 Yrs. |
|---|---|---|---|
| PARKE | 15,410 | 3,869 | 9,099 |
| PERRY | 19,107 | 4,950 | 11,366 |
| PIKE | 12,509 | 3,064 | 7,478 |
| PORTER | 128,932 | 35,523 | 80,711 |
| POSEY | 25,968 | 7,284 | 15,579 |
| PULASKI | 12,643 | 3,619 | 7,047 |
| PUTNAM | 30,315 | 7,006 | 19,465 |
| RANDOLPH | 27,148 | 7,026 | 15,946 |
| RIPLEY | 24,616 | 7,019 | 14,115 |
| RUSH | 18,129 | 5,060 | 10,402 |
| ST. JOSEPH | 247,052 | 62,463 | 149,710 |
| SCOTT | 20,991 | 5,832 | 12,666 |
| SHELBY | 40,307 | 11,005 | 24,373 |
| SPENCER | 19,490 | 5,320 | 11,626 |
| STARKE | 22,747 | 6,380 | 13,090 |
| STEUBEN | 27,446 | 7,176 | 16,681 |
| SULLIVAN | 18,993 | 4,836 | 10,762 |
| SWITZERLAND | 7,738 | 2,092 | 4,477 |
| TIPPECANOE | 130,598 | 27,384 | 90,895 |
| TIPTON | 16,119 | 4,215 | 9,520 |
| UNION | 6,976 | 1,950 | 4,059 |
| VANDERBURGH | 165,058 | 39,410 | 99,700 |
| VERMILLION | 16,773 | 4,170 | 9,706 |
| VIGO | 106,107 | 24,379 | 65,737 |
| WABASH | 35,069 | 9,217 | 20,645 |
| WARREN | 8,176 | 2,141 | 4,816 |
| WARRICK | 44,920 | 12,723 | 27,567 |
| WASHINGTON | 23,717 | 6,493 | 14,020 |
| WAYNE | 71,951 | 18,143 | 42,920 |
| WELLS | 25,948 | 7,378 | 15,067 |
| WHITE | 23,265 | 6,288 | 13,310 |
| WHITLEY | 27,651 | 7,855 | 16,212 |
| **INDIANA** | **5,544,159** | **1,455,964** | **3,391,999** |

## Table A.1b Population, 1990

**DEMOGRAPHICS**

| Counties | Median Age | Rank | % < 18 Yrs. | Rank | Dependency Ratio* | Rank |
|---|---|---|---|---|---|---|
| ADAMS | 30.6 | 89 | 31.7 | 2 | 82.3 | 2 |
| ALLEN | 32.1 | 81 | 27.8 | 32 | 64.2 | 70 |
| BARTHOLOMEW | 34.2 | 32 | 25.9 | 65 | 59.7 | 85 |
| BENTON | 34.7 | 27 | 28.2 | 22 | 81.2 | 4 |
| BLACKFORD | 35.7 | 10 | 25.4 | 73 | 68.4 | 43 |
| BOONE | 34.4 | 30 | 27.4 | 39 | 67.1 | 54 |
| BROWN | 36.5 | 2 | 24.6 | 83 | 59.5 | 86 |
| CARROLL | 35.0 | 21 | 26.5 | 55 | 70.3 | 32 |
| CASS | 35.0 | 20 | 26.4 | 56 | 71.5 | 28 |
| CLARK | 33.8 | 42 | 25.7 | 68 | 60.7 | 81 |
| CLAY | 35.2 | 16 | 26.1 | 62 | 75.4 | 8 |
| CLINTON | 34.1 | 37 | 27.6 | 34 | 75.8 | 7 |
| CRAWFORD | 34.0 | 38 | 27.5 | 37 | 71.8 | 27 |
| DAVIESS | 33.6 | 49 | 28.9 | 8 | 81.5 | 3 |
| DEARBORN | 33.1 | 64 | 28.6 | 13 | 68.0 | 47 |
| DECATUR | 32.6 | 77 | 28.9 | 9 | 73.0 | 16 |
| DEKALB | 31.9 | 83 | 28.9 | 7 | 69.2 | 40 |
| DELAWARE | 31.4 | 88 | 22.1 | 90 | 53.2 | 90 |
| DUBOIS | 32.1 | 80 | 28.1 | 23 | 67.9 | 48 |
| ELKHART | 31.8 | 86 | 28.5 | 16 | 65.8 | 59 |
| FAYETTE | 35.1 | 18 | 26.5 | 52 | 69.6 | 36 |
| FLOYD | 34.0 | 39 | 26.5 | 54 | 64.5 | 68 |
| FOUNTAIN | 35.9 | 8 | 25.9 | 64 | 74.1 | 13 |
| FRANKLIN | 32.7 | 74 | 29.6 | 3 | 72.4 | 19 |
| FULTON | 35.3 | 12 | 26.6 | 51 | 74.2 | 12 |
| GIBSON | 35.1 | 19 | 25.7 | 67 | 70.7 | 29 |
| GRANT | 34.9 | 24 | 24.8 | 82 | 62.8 | 73 |
| GREENE | 35.9 | 9 | 25.4 | 72 | 71.9 | 25 |
| HAMILTON | 32.9 | 70 | 29.0 | 5 | 59.4 | 87 |
| HANCOCK | 34.2 | 31 | 27.6 | 35 | 61.2 | 80 |

*The number of individuals < age 18 and > age 65 as a percentage of the total population.

Table A.1b Cont'd

| Counties | Median Age | Rank | % < 18 Yrs. | Rank | Dependency Ratio* | Rank |
|---|---|---|---|---|---|---|
| DEMOGRAPHICS | | | | | | |
| HARRISON | 33.2 | 61 | 28.3 | 21 | 65.7 | 61 |
| HENDRICKS | 33.3 | 60 | 27.9 | 29 | 60.2 | 83 |
| HENRY | 36.1 | 6 | 24.6 | 84 | 64.9 | 66 |
| HOWARD | 34.1 | 35 | 26.7 | 50 | 62.3 | 77 |
| HUNTINGTON | 32.8 | 71 | 27.7 | 33 | 72.2 | 20 |
| JACKSON | 33.6 | 50 | 27.0 | 47 | 68.2 | 45 |
| JASPER | 32.0 | 82 | 28.7 | 11 | 69.6 | 37 |
| JAY | 35.0 | 22 | 26.5 | 53 | 72.0 | 24 |
| JEFFERSON | 33.7 | 45 | 25.0 | 79 | 62.7 | 74 |
| JENNINGS | 33.1 | 62 | 27.0 | 46 | 62.7 | 75 |
| JOHNSON | 32.6 | 76 | 27.0 | 43 | 60.4 | 82 |
| KNOX | 33.5 | 51 | 23.2 | 87 | 64.3 | 69 |
| KOSCIUSKO | 32.2 | 78 | 28.8 | 10 | 68.4 | 44 |
| LAGRANGE | 28.0 | 90 | 35.1 | 1 | 82.8 | 1 |
| LAKE | 33.0 | 68 | 28.0 | 26 | 67.6 | 51 |
| LAPORTE | 34.2 | 33 | 25.3 | 74 | 62.4 | 76 |
| LAWRENCE | 35.3 | 13 | 25.5 | 69 | 66.7 | 58 |
| MADISON | 34.8 | 25 | 24.8 | 81 | 63.4 | 71 |
| MARION | 31.8 | 85 | 25.5 | 70 | 59.1 | 88 |
| MARSHALL | 33.3 | 59 | 28.5 | 14 | 72.1 | 23 |
| MARTIN | 34.2 | 34 | 27.0 | 45 | 69.1 | 42 |
| MIAMI | 31.5 | 87 | 28.4 | 18 | 66.8 | 56 |
| MONROE | 25.7 | 92 | 18.4 | 92 | 36.8 | 92 |
| MONTGOMERY | 34.0 | 40 | 25.2 | 77 | 65.3 | 64 |
| MORGAN | 32.9 | 69 | 27.8 | 30 | 61.8 | 78 |
| NEWTON | 33.6 | 48 | 29.0 | 6 | 73.2 | 15 |
| NOBLE | 31.9 | 84 | 29.3 | 4 | 70.7 | 30 |
| OHIO | 34.1 | 36 | 26.2 | 58 | 67.2 | 53 |
| ORANGE | 34.7 | 28 | 26.7 | 49 | 72.2 | 21 |
| OWEN | 34.7 | 26 | 26.8 | 48 | 67.0 | 55 |

Table A.1b Cont'd

| Counties | Median Age | Rank | % < 18 Yrs. | Rank | Dependency Ratio* | Rank |
|---|---|---|---|---|---|---|
| PARKE | 36.3 | 4 | 25.1 | 78 | 69.4 | 38 |
| PERRY | 33.5 | 52 | 25.9 | 63 | 68.1 | 46 |
| PIKE | 36.3 | 5 | 24.5 | 85 | 67.3 | 52 |
| PORTER | 32.7 | 73 | 27.6 | 36 | 59.7 | 84 |
| POSEY | 33.4 | 54 | 28.0 | 24 | 66.7 | 57 |
| PULASKI | 33.8 | 41 | 28.6 | 12 | 79.4 | 5 |
| PUTNAM | 32.1 | 79 | 23.1 | 88 | 55.7 | 89 |
| RANDOLPH | 35.6 | 11 | 25.9 | 66 | 70.2 | 33 |
| RIPLEY | 33.1 | 66 | 28.5 | 15 | 74.4 | 10 |
| RUSH | 33.6 | 47 | 27.9 | 28 | 74.3 | 11 |
| ST. JOSEPH | 32.8 | 72 | 25.3 | 75 | 65.0 | 65 |
| SCOTT | 32.7 | 75 | 27.8 | 31 | 65.7 | 60 |
| SHELBY | 33.1 | 63 | 27.3 | 40 | 65.4 | 63 |
| SPENCER | 33.7 | 46 | 27.3 | 41 | 67.6 | 49 |
| STARKE | 33.3 | 57 | 28.0 | 25 | 73.8 | 14 |
| STEUBEN | 33.4 | 53 | 26.1 | 61 | 64.5 | 67 |
| SULLIVAN | 36.7 | 1 | 25.5 | 71 | 76.5 | 6 |
| SWITZERLAND | 35.2 | 14 | 27.0 | 42 | 72.8 | 17 |
| TIPPECANOE | 26.5 | 91 | 21.0 | 91 | 43.7 | 91 |
| TIPTON | 35.2 | 15 | 26.1 | 60 | 69.3 | 39 |
| UNION | 33.7 | 44 | 28.0 | 27 | 71.9 | 26 |
| VANDERBURGH | 34.5 | 29 | 23.9 | 86 | 65.6 | 62 |
| VERMILLION | 36.5 | 3 | 24.9 | 80 | 72.8 | 18 |
| VIGO | 33.0 | 67 | 23.0 | 89 | 61.4 | 79 |
| WABASH | 33.7 | 43 | 26.3 | 57 | 69.9 | 34 |
| WARREN | 36.0 | 7 | 26.2 | 59 | 69.8 | 35 |
| WARRICK | 33.3 | 55 | 28.3 | 20 | 62.9 | 72 |
| WASHINGTON | 33.3 | 56 | 27.4 | 38 | 69.2 | 41 |
| WAYNE | 34.9 | 23 | 25.2 | 76 | 67.6 | 50 |
| WELLS | 33.1 | 65 | 28.4 | 17 | 72.2 | 22 |
| WHITE | 35.1 | 17 | 27.0 | 44 | 74.8 | 9 |
| WHITLEY | 33.3 | 58 | 28.4 | 19 | 70.6 | 31 |
| INDIANA | 32.8 |  | 26.3 |  | 63.4 |  |

## Table A.2 Labor Force Participation of Females

| Counties | With Own Children < 6 Yrs. (%) | With Own Children 6-17 Yrs. (%) |
|---|---|---|
| ADAMS | 58.1 | 79.0 |
| ALLEN | 67.0 | 82.1 |
| BARTHOLOMEW | 62.1 | 77.8 |
| BENTON | 70.2 | 84.6 |
| BLACKFORD | 70.5 | 80.5 |
| BOONE | 65.9 | 84.0 |
| BROWN | 63.4 | 76.7 |
| CARROLL | 66.4 | 82.5 |
| CASS | 66.1 | 80.3 |
| CLARK | 65.0 | 78.7 |
| CLAY | 57.9 | 71.9 |
| CLINTON | 64.3 | 80.6 |
| CRAWFORD | 50.9 | 70.1 |
| DAVIESS | 58.2 | 75.7 |
| DEARBORN | 58.7 | 76.0 |
| DECATUR | 65.1 | 77.3 |
| DEKALB | 69.9 | 85.5 |
| DELAWARE | 62.6 | 77.1 |
| DUBOIS | 82.4 | 83.0 |
| ELKHART | 63.7 | 83.6 |
| FAYETTE | 60.6 | 79.3 |
| FLOYD | 62.2 | 76.8 |
| FOUNTAIN | 57.8 | 73.0 |
| FRANKLIN | 54.0 | 73.7 |
| FULTON | 67.3 | 80.7 |
| GIBSON | 73.1 | 75.9 |
| GRANT | 64.1 | 76.2 |
| GREENE | 59.0 | 71.7 |
| HAMILTON | 62.4 | 77.1 |
| HANCOCK | 69.5 | 81.9 |

**Table A.2 Cont'd**

| Counties | With Own Children < 6 Yrs. (%) | With Own Children 6-17 Yrs. (%) |
|---|---|---|
| **ECONOMICS** | | |
| HARRISON | 66.1 | 76.8 |
| HENDRICKS | 68.2 | 79.5 |
| HENRY | 60.1 | 76.3 |
| HOWARD | 59.7 | 75.6 |
| HUNTINGTON | 73.1 | 84.9 |
| JACKSON | 71.7 | 76.4 |
| JASPER | 54.0 | 70.2 |
| JAY | 70.8 | 83.0 |
| JEFFERSON | 63.9 | 78.9 |
| JENNINGS | 64.7 | 74.2 |
| JOHNSON | 65.1 | 81.4 |
| KNOX | 68.6 | 75.2 |
| KOSCIUSKO | 62.5 | 77.4 |
| LAGRANGE | 48.5 | 74.4 |
| LAKE | 52.9 | 69.5 |
| LAPORTE | 63.7 | 77.7 |
| LAWRENCE | 61.7 | 73.1 |
| MADISON | 64.5 | 78.9 |
| MARION | 67.7 | 79.1 |
| MARSHALL | 70.9 | 80.3 |
| MARTIN | 58.3 | 70.3 |
| MIAMI | 55.0 | 75.5 |
| MONROE | 65.3 | 79.4 |
| MONTGOMERY | 65.2 | 79.0 |
| MORGAN | 57.3 | 76.4 |
| NEWTON | 57.7 | 73.3 |
| NOBLE | 68.8 | 84.4 |
| OHIO | 53.3 | 71.1 |
| ORANGE | 57.2 | 75.9 |
| OWEN | 58.8 | 74.1 |

## Table A.2 Cont'd

| Counties | With Own Children < 6 Yrs. (%) | With Own Children 6-17 Yrs. (%) |
|---|---|---|
| PARKE | 57.1 | 69.4 |
| PERRY | 70.6 | 76.7 |
| PIKE | 56.9 | 68.6 |
| PORTER | 56.6 | 71.5 |
| POSEY | 61.6 | 75.2 |
| PULASKI | 62.8 | 78.2 |
| PUTNAM | 61.1 | 80.4 |
| RANDOLPH | 60.5 | 76.4 |
| RIPLEY | 65.4 | 77.3 |
| RUSH | 62.8 | 77.2 |
| ST. JOSEPH | 62.7 | 78.7 |
| SCOTT | 60.9 | 63.1 |
| SHELBY | 67.8 | 78.1 |
| SPENCER | 65.9 | 68.5 |
| STARKE | 54.9 | 76.0 |
| STEUBEN | 72.4 | 80.9 |
| SULLIVAN | 57.1 | 73.4 |
| SWITZERLAND | 51.8 | 71.0 |
| TIPPECANOE | 64.5 | 81.0 |
| TIPTON | 63.2 | 83.0 |
| UNION | 71.7 | 76.9 |
| VANDERBURGH | 68.6 | 79.6 |
| VERMILLION | 58.8 | 67.7 |
| VIGO | 60.4 | 73.3 |
| WABASH | 74.5 | 81.8 |
| WARREN | 54.7 | 75.1 |
| WARRICK | 63.7 | 72.3 |
| WASHINGTON | 56.8 | 80.7 |
| WAYNE | 61.9 | 77.4 |
| WELLS | 69.1 | 84.6 |
| WHITE | 69.9 | 82.0 |
| WHITLEY | 66.0 | 86.7 |
| **INDIANA** | **63.6** | **77.4** |

## Table A.3 Income/Rental Housing Costs, 1989

| | Median Family Income | Per Capita Income | Median Gross Rent |
|---|---|---|---|
| ADAMS | 32,314 | 11,655 | 319 |
| ALLEN | 37,866 | 14,631 | 393 |
| BARTHOLOMEW | 36,195 | 14,216 | 396 |
| BENTON | 30,935 | 12,024 | 316 |
| BLACKFORD | 30,125 | 11,151 | 283 |
| BOONE | 40,485 | 16,674 | 388 |
| BROWN | 32,405 | 13,048 | 378 |
| CARROLL | 32,816 | 12,165 | 307 |
| CASS | 31,049 | 11,860 | 299 |
| CLARK | 32,172 | 12,068 | 362 |
| CLAY | 28,727 | 10,538 | 295 |
| CLINTON | 31,070 | 11,849 | 326 |
| CRAWFORD | 23,307 | 8,837 | 241 |
| DAVIESS | 27,074 | 10,176 | 277 |
| DEARBORN | 35,711 | 12,542 | 321 |
| DECATUR | 32,312 | 11,930 | 357 |
| DEKALB | 34,853 | 12,665 | 345 |
| DELAWARE | 31,724 | 12,168 | 334 |
| DUBOIS | 36,293 | 12,942 | 316 |
| ELKHART | 35,152 | 13,825 | 405 |
| FAYETTE | 30,543 | 11,577 | 304 |
| FLOYD | 33,085 | 13,203 | 349 |
| FOUNTAIN | 28,770 | 11,470 | 290 |
| FRANKLIN | 31,770 | 11,295 | 284 |
| FULTON | 30,000 | 11,164 | 325 |
| GIBSON | 32,080 | 11,615 | 294 |
| GRANT | 31,050 | 12,308 | 318 |
| GREENE | 27,426 | 10,798 | 274 |
| HAMILTON | 51,167 | 20,426 | 505 |
| HANCOCK | 41,887 | 15,059 | 386 |

Table A.3 Cont'd

| | Median Family Income | Per Capita Income | Median Gross Rent |
|---|---|---|---|
| **ECONOMICS** | | | |
| HARRISON | 31,160 | 11,159 | 314 |
| HENDRICKS | 44,257 | 15,526 | 428 |
| HENRY | 30,579 | 11,914 | 301 |
| HOWARD | 36,902 | 14,346 | 364 |
| HUNTINGTON | 33,402 | 12,509 | 344 |
| JACKSON | 30,191 | 11,562 | 333 |
| JASPER | 32,288 | 11,256 | 326 |
| JAY | 27,720 | 10,331 | 281 |
| JEFFERSON | 29,608 | 11,631 | 295 |
| JENNINGS | 28,787 | 10,333 | 322 |
| JOHNSON | 39,687 | 14,992 | 414 |
| KNOX | 27,732 | 11,077 | 310 |
| KOSCIUSKO | 35,548 | 13,323 | 378 |
| LAGRANGE | 29,843 | 10,011 | 338 |
| LAKE | 35,604 | 12,663 | 393 |
| LAPORTE | 33,198 | 12,973 | 368 |
| LAWRENCE | 30,105 | 11,492 | 311 |
| MADISON | 33,332 | 12,811 | 339 |
| MARION | 35,054 | 14,614 | 412 |
| MARSHALL | 31,792 | 12,428 | 362 |
| MARTIN | 27,628 | 10,177 | 264 |
| MIAMI | 27,435 | 10,862 | 318 |
| MONROE | 32,859 | 12,017 | 401 |
| MONTGOMERY | 33,311 | 12,419 | 323 |
| MORGAN | 36,462 | 13,068 | 380 |
| NEWTON | 32,513 | 11,925 | 322 |
| NOBLE | 33,757 | 11,772 | 332 |
| OHIO | 30,279 | 10,786 | 272 |
| ORANGE | 24,813 | 9,222 | 273 |
| OWEN | 27,207 | 10,572 | 322 |

**Table A.3 Cont'd**

| | Median Family Income | Per Capita Income | Median Gross Rent |
|---|---|---|---|
| PARKE | 28,921 | 11,058 | 278 |
| PERRY | 28,666 | 10,567 | 260 |
| PIKE | 27,927 | 10,934 | 277 |
| PORTER | 41,929 | 15,059 | 431 |
| POSEY | 36,333 | 12,879 | 309 |
| PULASKI | 30,276 | 11,107 | 306 |
| PUTNAM | 31,892 | 11,154 | 345 |
| RANDOLPH | 28,551 | 11,241 | 279 |
| RIPLEY | 31,715 | 11,563 | 299 |
| RUSH | 29,395 | 10,869 | 297 |
| ST. JOSEPH | 34,206 | 13,277 | 402 |
| SCOTT | 25,542 | 9,766 | 301 |
| SHELBY | 34,422 | 12,935 | 369 |
| SPENCER | 33,618 | 11,462 | 284 |
| STARKE | 26,525 | 9,980 | 329 |
| STEUBEN | 33,882 | 12,399 | 359 |
| SULLIVAN | 27,260 | 10,668 | 261 |
| SWITZERLAND | 27,608 | 10,201 | 260 |
| TIPPECANOE | 36,073 | 12,570 | 401 |
| TIPTON | 36,127 | 13,669 | 325 |
| UNION | 27,975 | 10,700 | 289 |
| VANDERBURGH | 32,558 | 13,434 | 343 |
| VERMILLION | 29,100 | 11,217 | 305 |
| VIGO | 29,871 | 11,973 | 308 |
| WABASH | 31,030 | 11,511 | 303 |
| WARREN | 29,271 | 10,911 | 273 |
| WARRICK | 38,375 | 14,037 | 362 |
| WASHINGTON | 26,564 | 10,187 | 302 |
| WAYNE | 27,905 | 11,535 | 300 |
| WELLS | 36,001 | 12,765 | 323 |
| WHITE | 30,459 | 12,111 | 335 |
| WHITLEY | 35,457 | 12,605 | 321 |
| INDIANA | 34,082 | 13,149 | 374 |

## Table A.4a 1989 Poverty Status (Persons), 1989

**ECONOMICS**

| Counties | All Persons (%) | Related Children < 18 Yrs. (%) | Related Children < 5 Yrs. (%) | Related Children 5-17 Yrs. (%) |
|---|---|---|---|---|
| ADAMS | 11.6 | 17.2 | 22.5 | 15.2 |
| ALLEN | 7.9 | 10.2 | 12.8 | 9.2 |
| BARTHOLOMEW | 8.5 | 10.6 | 13.1 | 9.6 |
| BENTON | 8.0 | 8.3 | 9.4 | 7.9 |
| BLACKFORD | 9.9 | 12.1 | 19.2 | 9.5 |
| BOONE | 6.3 | 7.9 | 8.7 | 7.6 |
| BROWN | 6.9 | 7.9 | 8.7 | 7.7 |
| CARROLL | 7.5 | 9.1 | 10.9 | 8.4 |
| CASS | 10.3 | 13.1 | 18.1 | 11.3 |
| CLARK | 10.1 | 13.6 | 17.1 | 12.4 |
| CLAY | 11.8 | 14.8 | 20.1 | 13.0 |
| CLINTON | 9.4 | 11.4 | 16.1 | 9.7 |
| CRAWFORD | 18.5 | 21.7 | 21.4 | 21.8 |
| DAVIESS | 15.5 | 20.6 | 25.0 | 18.9 |
| DEARBORN | 8.5 | 10.7 | 12.4 | 10.1 |
| DECATUR | 9.1 | 11.0 | 16.0 | 9.2 |
| DEKALB | 6.5 | 8.1 | 12.2 | 6.7 |
| DELAWARE | 16.7 | 17.4 | 21.1 | 15.9 |
| DUBOIS | 6.1 | 5.3 | 6.5 | 4.8 |
| ELKHART | 7.0 | 9.4 | 11.5 | 8.6 |
| FAYETTE | 10.8 | 14.1 | 15.9 | 13.6 |
| FLOYD | 11.0 | 15.9 | 19.9 | 14.5 |
| FOUNTAIN | 9.8 | 12.7 | 14.3 | 12.1 |
| FRANKLIN | 10.6 | 12.3 | 14.0 | 11.7 |
| FULTON | 10.3 | 12.6 | 15.6 | 11.5 |
| GIBSON | 9.6 | 10.9 | 18.5 | 8.3 |
| GRANT | 13.1 | 17.8 | 22.7 | 16.2 |
| GREENE | 13.2 | 18.0 | 23.7 | 16.1 |
| HAMILTON | 3.6 | 4.0 | 5.1 | 3.6 |
| HANCOCK | 4.5 | 5.3 | 6.7 | 4.9 |

**Table A.4a Cont'd**

| Counties | All Persons (%) | Related Children < 18 Yrs. (%) | Related Children < 5 Yrs. (%) | Related Children 5-17 Yrs. (%) |
|---|---|---|---|---|
| HARRISON | 9.8 | 12.4 | 12.8 | 12.3 |
| HENDRICKS | 3.7 | 4.0 | 3.7 | 4.1 |
| HENRY | 12.4 | 17.2 | 26.7 | 14.0 |
| HOWARD | 11.5 | 16.9 | 23.1 | 14.7 |
| HUNTINGTON | 6.6 | 7.2 | 6.7 | 7.4 |
| JACKSON | 10.5 | 13.1 | 15.4 | 12.3 |
| JASPER | 8.0 | 9.9 | 13.5 | 8.7 |
| JAY | 9.7 | 11.8 | 19.7 | 9.0 |
| JEFFERSON | 11.6 | 15.6 | 19.1 | 14.4 |
| JENNINGS | 12.8 | 16.5 | 24.2 | 13.7 |
| JOHNSON | 6.9 | 7.7 | 9.8 | 6.9 |
| KNOX | 15.7 | 19.7 | 23.3 | 18.4 |
| KOSCIUSKO | 6.6 | 8.0 | 8.1 | 7.9 |
| LAGRANGE | 11.5 | 15.6 | 14.9 | 15.9 |
| LAKE | 13.8 | 21.3 | 24.3 | 20.3 |
| LAPORTE | 10.1 | 14.4 | 17.4 | 13.3 |
| LAWRENCE | 9.7 | 12.3 | 19.8 | 9.8 |
| MADISON | 12.7 | 19.6 | 25.9 | 17.4 |
| MARION | 12.1 | 17.8 | 19.3 | 17.2 |
| MARSHALL | 7.5 | 9.6 | 13.2 | 8.3 |
| MARTIN | 13.8 | 17.4 | 18.8 | 16.9 |
| MIAMI | 10.9 | 15.0 | 18.5 | 13.6 |
| MONROE | 19.4 | 13.9 | 18.3 | 12.1 |
| MONTGOMERY | 9.4 | 11.7 | 14.4 | 10.6 |
| MORGAN | 6.7 | 7.7 | 9.5 | 7.0 |
| NEWTON | 8.9 | 12.1 | 13.2 | 11.8 |
| NOBLE | 8.0 | 11.2 | 12.4 | 10.7 |
| OHIO | 9.9 | 8.6 | 10.4 | 8.0 |
| ORANGE | 15.3 | 19.0 | 22.8 | 17.7 |
| OWEN | 13.6 | 17.0 | 24.2 | 14.4 |

Table A.4a Cont'd

| Counties | All Persons (%) | Related Children < 18 Yrs. (%) | Related Children < 5 Yrs. (%) | Related Children 5-17 Yrs. (%) |
|---|---|---|---|---|
| PARKE | 12.2 | 12.7 | 17.0 | 11.1 |
| PERRY | 11.6 | 13.9 | 17.1 | 12.9 |
| PIKE | 13.3 | 19.5 | 23.5 | 18.1 |
| PORTER | 6.1 | 7.3 | 9.3 | 6.7 |
| POSEY | 7.6 | 8.9 | 11.7 | 7.8 |
| PULASKI | 10.8 | 13.5 | 12.3 | 13.9 |
| PUTNAM | 8.3 | 10.4 | 14.8 | 8.7 |
| RANDOLPH | 11.4 | 15.0 | 18.6 | 13.8 |
| RIPLEY | 10.5 | 12.9 | 17.2 | 11.4 |
| RUSH | 11.2 | 12.9 | 16.3 | 11.7 |
| ST. JOSEPH | 9.7 | 13.4 | 15.6 | 12.5 |
| SCOTT | 19.0 | 26.7 | 28.6 | 26.1 |
| SHELBY | 7.2 | 8.8 | 11.2 | 7.9 |
| SPENCER | 9.9 | 10.3 | 14.1 | 9.0 |
| STARKE | 13.4 | 18.2 | 21.9 | 17.0 |
| STEUBEN | 5.6 | 4.9 | 5.8 | 4.6 |
| SULLIVAN | 12.5 | 15.4 | 19.5 | 14.1 |
| SWITZERLAND | 15.2 | 20.1 | 33.3 | 16.1 |
| TIPPECANOE | 14.4 | 10.2 | 14.1 | 8.5 |
| TIPTON | 6.4 | 7.7 | 8.0 | 7.6 |
| UNION | 9.5 | 10.9 | 18.0 | 8.7 |
| VANDERBURGH | 12.5 | 16.8 | 20.7 | 15.2 |
| VERMILLION | 11.7 | 14.5 | 19.9 | 12.7 |
| VIGO | 14.7 | 18.3 | 25.2 | 15.6 |
| WABASH | 9.2 | 10.0 | 14.7 | 8.4 |
| WARREN | 9.2 | 11.0 | 14.1 | 9.8 |
| WARRICK | 6.6 | 8.5 | 10.1 | 7.9 |
| WASHINGTON | 14.3 | 17.6 | 21.3 | 16.4 |
| WAYNE | 14.9 | 20.4 | 27.7 | 17.8 |
| WELLS | 5.6 | 6.5 | 7.8 | 5.9 |
| WHITE | 7.7 | 7.8 | 8.3 | 7.7 |
| WHITLEY | 5.2 | 6.0 | 5.8 | 6.0 |
| **INDIANA** | **10.7** | **13.9** | **16.8** | **12.8** |

# Table A.4b Poverty Status (Families), 1989

| Counties | % of All Families in Poverty | % of Families With Related Children < 18 Yrs. in Poverty | % of Families With Related Children < 5 Yrs. in Poverty |
|---|---|---|---|
| ADAMS | 8.4 | 12.9 | 18.8 |
| ALLEN | 5.6 | 8.4 | 11.6 |
| BARTHOLOMEW | 6.1 | 9.3 | 12.8 |
| BENTON | 6.3 | 7.0 | 10.4 |
| BLACKFORD | 6.9 | 11.2 | 17.8 |
| BOONE | 4.2 | 6.8 | 8.3 |
| BROWN | 4.4 | 6.7 | 8.5 |
| CARROLL | 5.4 | 7.1 | 9.8 |
| CASS | 7.9 | 11.6 | 16.4 |
| CLARK | 8.0 | 12.4 | 16.0 |
| CLAY | 9.0 | 12.1 | 16.8 |
| CLINTON | 7.5 | 10.5 | 13.6 |
| CRAWFORD | 15.2 | 20.6 | 20.8 |
| DAVIESS | 12.4 | 17.3 | 23.9 |
| DEARBORN | 7.1 | 10.1 | 12.1 |
| DECATUR | 7.2 | 10.2 | 12.4 |
| DEKALB | 4.6 | 6.4 | 10.9 |
| DELAWARE | 10.3 | 15.9 | 21.4 |
| DUBOIS | 4.2 | 4.5 | 5.2 |
| ELKHART | 5.3 | 7.7 | 9.7 |
| FAYETTE | 7.5 | 11.7 | 15.2 |
| FLOYD | 8.8 | 14.2 | 19.2 |
| FOUNTAIN | 6.4 | 10.4 | 13.1 |
| FRANKLIN | 8.3 | 10.9 | 14.4 |
| FULTON | 7.7 | 11.6 | 15.7 |
| GIBSON | 7.8 | 10.5 | 16.1 |
| GRANT | 10.1 | 15.1 | 20.8 |
| GREENE | 10.5 | 15.0 | 20.2 |
| HAMILTON | 2.6 | 3.5 | 4.0 |
| HANCOCK | 3.2 | 4.6 | 6.9 |

Table A.4b Cont'd

| Counties | % of All Families in Poverty | % of Families With Related Children < 18 Yrs. in Poverty | % of Families With Related Children < 5 Yrs. in Poverty |
|---|---|---|---|
| HARRISON | 7.2 | 9.2 | 11.6 |
| HENDRICS | 2.6 | 3.6 | 3.8 |
| HENRY | 9.8 | 15.0 | 23.2 |
| HOWARD | 9.5 | 14.8 | 20.6 |
| HUNTINGTON | 4.5 | 6.0 | 6.7 |
| JACKSON | 8.3 | 12.0 | 14.7 |
| JASPER | 7.2 | 10.1 | 12.6 |
| JAY | 7.2 | 9.8 | 13.3 |
| JEFFERSON | 9.1 | 13.8 | 19.5 |
| JENNINGS | 9.3 | 12.6 | 17.6 |
| JOHNSON | 4.5 | 6.5 | 9.3 |
| KNOX | 11.4 | 18.0 | 20.7 |
| KOSCIUSKO | 4.6 | 6.2 | 7.9 |
| LAGRANGE | 8.4 | 9.7 | 13.5 |
| LAKE | 11.7 | 18.2 | 22.8 |
| LAPORTE | 7.8 | 12.4 | 15.0 |
| LAWRENCE | 7.1 | 10.7 | 15.7 |
| MADISON | 10.3 | 17.2 | 23.0 |
| MARION | 9.3 | 14.5 | 17.1 |
| MARSHALL | 5.4 | 7.7 | 10.6 |
| MARTIN | 11.2 | 14.1 | 16.8 |
| MIAMI | 8.8 | 13.3 | 15.8 |
| MONROE | 9.5 | 12.9 | 17.5 |
| MONTGOMERY | 5.9 | 9.6 | 13.2 |
| MORGAN | 5.1 | 7.0 | 9.8 |
| NEWTON | 6.5 | 9.7 | 10.5 |
| NOBLE | 5.6 | 9.2 | 11.5 |
| OHIO | 6.5 | 7.8 | 11.8 |
| ORANGE | 11.9 | 14.8 | 19.5 |
| OWEN | 10.9 | 14.0 | 20.5 |

**Table A.4b Cont'd**

| Counties | % of All Families in Poverty | % of Families With Related Children < 18 Yrs. in Poverty | % of Families With Related Children < 5 Yrs. in Poverty |
|---|---|---|---|
| PARKE | 9.6 | 11.1 | 18.7 |
| PERRY | 9.5 | 12.4 | 18.2 |
| PIKE | 10.7 | 14.2 | 19.1 |
| PORTER | 4.6 | 6.7 | 8.7 |
| POSEY | 5.4 | 8.0 | 11.0 |
| PULASKI | 8.1 | 10.7 | 11.7 |
| PUTNAM | 5.8 | 9.2 | 13.7 |
| RANDOLPH | 8.9 | 13.7 | 17.7 |
| RIPLEY | 8.1 | 9.7 | 13.1 |
| RUSH | 8.4 | 10.5 | 13.2 |
| ST. JOSEPH | 7.1 | 11.5 | 15.2 |
| SCOTT | 15.6 | 21.9 | 23.0 |
| SHELBY | 5.3 | 8.1 | 9.7 |
| SPENCER | 6.9 | 9.5 | 12.9 |
| STARKE | 10.9 | 16.0 | 21.1 |
| STEUBEN | 3.7 | 4.6 | 5.2 |
| SULLIVAN | 9.9 | 13.6 | 19.1 |
| SWITZERLAND | 11.3 | 15.8 | 29.7 |
| TIPPECANOE | 6.8 | 9.9 | 13.3 |
| TIPTON | 4.5 | 6.2 | 10.3 |
| UNION | 6.9 | 10.2 | 13.8 |
| VANDERBURGH | 9.1 | 14.4 | 17.7 |
| VERMILLION | 8.9 | 12.7 | 20.0 |
| VIGO | 10.7 | 16.4 | 22.1 |
| WABASH | 7.0 | 9.9 | 12.6 |
| WARREN | 7.7 | 10.2 | 14.2 |
| WARRICK | 5.0 | 7.0 | 9.4 |
| WASHINGTON | 11.9 | 15.0 | 19.4 |
| WAYNE | 11.6 | 17.9 | 25.8 |
| WELLS | 4.4 | 5.6 | 8.1 |
| WHITE | 5.3 | 7.4 | 7.8 |
| WHITLEY | 3.1 | 4.5 | 5.9 |
| **INDIANA** | **7.9** | **11.9** | **15.3** |

## Table A.4c Poverty Status (Female Householders), 1989

| Counties | % of Female Householder Families | % of Families With Related Children < 18 Yrs. | % of Families With Related Children < 5 Yrs. |
|---|---|---|---|
| ADAMS | 29.5 | 38.5 | 58.5 |
| ALLEN | 23.0 | 30.3 | 46.4 |
| BARTHOLOMEW | 22.5 | 31.0 | 42.4 |
| BENTON | 26.9 | 34.0 | 60.0 |
| BLACKFORD | 35.8 | 45.4 | 48.6 |
| BOONE | 23.3 | 32.8 | 49.4 |
| BROWN | 13.8 | 27.8 | 17.9 |
| CARROLL | 18.7 | 25.2 | 33.0 |
| CASS | 32.8 | 42.1 | 62.1 |
| CLARK | 25.6 | 35.8 | 53.1 |
| CLAY | 32.2 | 44.2 | 76.1 |
| CLINTON | 28.6 | 35.7 | 61.0 |
| CRAWFORD | 42.8 | 62.0 | 68.3 |
| DAVIESS | 37.5 | 47.4 | 59.1 |
| DEARBORN | 29.5 | 42.2 | 70.4 |
| DECATUR | 25.0 | 36.7 | 48.2 |
| DEKALB | 13.2 | 19.5 | 31.1 |
| DELAWARE | 38.5 | 49.0 | 65.5 |
| DUBOIS | 14.9 | 22.7 | 25.3 |
| ELKHART | 23.0 | 30.7 | 47.2 |
| FAYETTE | 28.4 | 39.4 | 55.6 |
| FLOYD | 32.2 | 43.6 | 65.1 |
| FOUNTAIN | 25.7 | 35.5 | 52.7 |
| FRANKLIN | 27.5 | 42.9 | 65.3 |
| FULTON | 28.0 | 35.3 | 71.9 |
| GIBSON | 32.3 | 40.3 | 66.1 |
| GRANT | 32.7 | 41.2 | 57.8 |
| GREENE | 34.3 | 46.9 | 52.5 |
| HAMILTON | 15.6 | 20.8 | 29.2 |
| HANCOCK | 18.8 | 25.2 | 50.3 |

| Counties | % of Female Householder Families | % of Families With Related Children < 18 Yrs. | % of Families With Related Children < 5 Yrs. |
|---|---|---|---|
| HARRISON | 19.1 | 29.2 | 43.9 |
| HENDRICKS | 15.4 | 22.8 | 32.1 |
| HENRY | 33.2 | 43.5 | 55.3 |
| HOWARD | 36.8 | 45.8 | 65.3 |
| HUNTINGTON | 20.1 | 26.4 | 38.4 |
| JACKSON | 25.9 | 34.2 | 54.5 |
| JASPER | 32.9 | 48.0 | 64.4 |
| JAY | 21.1 | 24.7 | 43.0 |
| JEFFERSON | 31.0 | 41.6 | 64.9 |
| JENNINGS | 19.8 | 22.7 | 23.6 |
| JOHNSON | 19.0 | 25.1 | 43.2 |
| KNOX | 41.9 | 56.8 | 70.0 |
| KOSCIUSKO | 22.3 | 28.5 | 52.5 |
| LAGRANGE | 17.9 | 24.4 | 37.9 |
| LAKE | 40.3 | 53.8 | 68.2 |
| LAPORTE | 31.7 | 43.8 | 58.5 |
| LAWRENCE | 22.5 | 35.0 | 53.3 |
| MADISON | 36.9 | 50.2 | 67.7 |
| MARION | 28.5 | 37.5 | 51.1 |
| MARSHALL | 20.4 | 30.2 | 41.7 |
| MARTIN | 37.7 | 42.6 | 87.2 |
| MIAMI | 36.8 | 50.0 | 70.4 |
| MONROE | 28.6 | 36.5 | 53.6 |
| MONTGOMERY | 26.2 | 34.5 | 55.5 |
| MORGAN | 19.9 | 28.2 | 36.2 |
| NEWTON | 26.2 | 37.8 | 57.4 |
| NOBLE | 25.5 | 35.9 | 43.0 |
| OHIO | 15.6 | 30.0 | 100.0 |
| ORANGE | 29.5 | 40.9 | 46.9 |
| OWEN | 33.2 | 40.3 | 48.3 |

**Table A.4c Cont'd**

| Counties | % of Female Householder Families | % of Families With Related Children < 18 Yrs. | % of Families With Related Children < 5 Yrs. |
|---|---|---|---|
| PARKE | 27.2 | 35.2 | 59.3 |
| PERRY | 32.3 | 40.9 | 56.9 |
| PIKE | 35.8 | 51.5 | 53.3 |
| PORTER | 22.1 | 31.0 | 46.4 |
| POSEY | 27.1 | 33.7 | 50.3 |
| PULASKI | 31.9 | 45.5 | 71.2 |
| PUTNAM | 22.3 | 36.6 | 53.3 |
| RANDOLPH | 37.8 | 49.5 | 66.3 |
| RIPLEY | 21.5 | 29.6 | 45.1 |
| RUSH | 25.8 | 32.9 | 59.7 |
| ST. JOSEPH | 28.2 | 38.9 | 56.0 |
| SCOTT | 42.0 | 51.4 | 72.7 |
| SHELBY | 21.1 | 29.7 | 56.1 |
| SPENCER | 25.7 | 40.7 | 71.9 |
| STARKE | 33.6 | 44.8 | 66.9 |
| STEUBEN | 14.6 | 18.9 | 31.3 |
| SULLIVAN | 25.4 | 34.2 | 63.6 |
| SWITZERLAND | 36.6 | 46.9 | 87.2 |
| TIPPECANOE | 23.8 | 31.2 | 44.2 |
| TIPTON | 17.7 | 24.5 | 55.9 |
| UNION | 28.8 | 37.8 | 64.0 |
| VANDERBURGH | 32.7 | 44.1 | 61.2 |
| VERMILLION | 32.9 | 49.5 | 67.5 |
| VIGO | 33.4 | 46.6 | 60.9 |
| WABASH | 23.2 | 30.2 | 48.3 |
| WARREN | 25.8 | 38.8 | 65.2 |
| WARRICK | 22.3 | 33.4 | 48.1 |
| WASHINGTON | 39.2 | 46.7 | 68.7 |
| WAYNE | 40.2 | 51.9 | 74.1 |
| WELLS | 17.2 | 25.2 | 47.7 |
| WHITE | 20.7 | 28.1 | 50.0 |
| WHITLEY | 13.5 | 19.4 | 33.9 |
| INDIANA | 29.6 | 39.7 | 55.8 |

## Table A.5 Students Receiving Free Lunches

ECONOMICS

| Counties | % of Students Receiving School Lunch 1990 | % of Students Receiving School Lunch 1991 | % Change 1990-91 |
|---|---|---|---|
| ADAMS | 10.3 | 12.3 | 19.4 |
| ALLEN | 17.3 | 16.0 | -7.5 |
| BARTHOLOMEW | 13.8 | 16.2 | 17.4 |
| BENTON | 16.1 | 17.8 | 10.6 |
| BLACKFORD | 18.7 | 20.5 | 9.6 |
| BOONE | 8.5 | 9.7 | 14.1 |
| BROWN | 11.9 | 17.0 | 42.9 |
| CARROLL | 11.5 | 13.1 | 13.9 |
| CASS | 15.6 | 18.6 | 19.2 |
| CLARK | 19.3 | 21.6 | 11.9 |
| CLAY | 18.1 | 18.1 | 0.0 |
| CLINTON | 19.3 | 19.5 | 1.0 |
| CRAWFORD | 26.2 | 30.5 | 16.4 |
| DAVIESS | 17.7 | 18.9 | 6.8 |
| DEARBORN | 14.3 | 15.9 | 11.2 |
| DECATUR | 12.1 | 14.6 | 20.7 |
| DEKALB | 8.9 | 11.2 | 25.8 |
| DELAWARE | 21.9 | 22.6 | 3.2 |
| DUBOIS | 5.7 | 7.0 | 22.8 |
| ELKHART | 13.9 | 14.6 | 5.0 |
| FAYETTE | 21.4 | 21.4 | 0.0 |
| FLOYD | 19.6 | 22.9 | 16.8 |
| FOUNTAIN | 15.4 | 17.6 | 14.3 |
| FRANKLIN | 13.7 | 17.0 | 24.1 |
| FULTON | 13.3 | 14.6 | 9.8 |
| GIBSON | 10.8 | 11.4 | 5.6 |
| GRANT | 21.9 | 23.2 | 5.9 |
| GREENE | 18.7 | 19.4 | 3.7 |
| HAMILTON | 4.7 | 4.9 | 4.3 |
| HANCOCK | 5.7 | 6.5 | 14.0 |

Table A.5 Cont'd

| Counties | % of Students Receiving School Lunch 1990 | % of Students Receiving School Lunch 1991 | % Change 1990-91 |
|---|---|---|---|
| HARRISON | 17.7 | 18.7 | 5.6 |
| HENDRICKS | 4.9 | 6.0 | 22.4 |
| HENRY | 18.0 | 21.3 | 18.3 |
| HOWARD | 18.9 | 19.5 | 3.2 |
| HUNTINGTON | 8.2 | 11.5 | 40.2 |
| JACKSON | 16.4 | 17.6 | 7.3 |
| JASPER | 12.2 | 14.8 | 21.3 |
| JAY | 19.0 | 19.0 | 0.0 |
| JEFFERSON | 20.3 | 20.5 | 1.0 |
| JENNINGS | 19.8 | 22.4 | 13.1 |
| JOHNSON | 8.4 | 9.6 | 14.3 |
| KNOX | 23.9 | 24.3 | 1.7 |
| KOSCIUSKO | 15.7 | 13.5 | -14.0 |
| LAGRANGE | 9.2 | 9.5 | 3.3 |
| LAKE | 25.5 | 27.9 | 9.4 |
| LAPORTE | 15.7 | 18.3 | 16.6 |
| LAWRENCE | 16.2 | 20.9 | 29.0 |
| MADISON | 19.5 | 19.7 | 1.0 |
| MARION | 30.8 | 30.8 | 0.0 |
| MARSHALL | 13.1 | 15.2 | 16.0 |
| MARTIN | 20.7 | 21.5 | 3.9 |
| MIAMI | 15.7 | 18.1 | 15.3 |
| MONROE | 14.5 | 13.8 | -4.8 |
| MONTGOMERY | 12.7 | 14.6 | 15.0 |
| MORGAN | 11.8 | 12.6 | 6.8 |
| NEWTON | 13.7 | 20.6 | 50.4 |
| NOBLE | 12.0 | 14.5 | 20.8 |
| OHIO | 15.0 | 17.0 | 13.3 |
| ORANGE | 24.4 | 28.2 | 15.6 |
| OWEN | 18.1 | 21.0 | 16.0 |

Table A.5 Cont'd

| Counties | % of Students Receiving School Lunch 1990 | % of Students Receiving School Lunch 1991 | % Change 1990-91 |
|---|---|---|---|
| **ECONOMICS** | | | |
| PARKE | 19.7 | 21.3 | 8.1 |
| PERRY | 16.4 | 18.9 | 15.2 |
| PIKE | 17.3 | 17.9 | 3.5 |
| PORTER | 8.6 | 9.8 | 14.0 |
| POSEY | 11.2 | 13.5 | 20.5 |
| PULASKI | 13.9 | 16.0 | 15.1 |
| PUTNAM | 14.3 | 15.3 | 7.0 |
| RANDOLPH | 17.6 | 21.3 | 21.0 |
| RIPLEY | 13.9 | 16.9 | 21.6 |
| RUSH | 19.3 | 20.5 | 6.2 |
| ST. JOSEPH | 22.5 | 25.2 | 12.0 |
| SCOTT | 27.8 | 29.4 | 5.8 |
| SHELBY | 10.0 | 13.3 | 33.0 |
| SPENCER | 10.6 | 12.4 | 17.0 |
| STARKE | 22.6 | 23.2 | 2.7 |
| STEUBEN | 11.2 | 13.0 | 16.1 |
| SULLIVAN | 17.8 | 18.9 | 6.2 |
| SWITZERLAND | 28.5 | 29.5 | 3.5 |
| TIPPECANOE | 13.4 | 13.9 | 3.7 |
| TIPTON | 11.9 | 11.3 | -5.0 |
| UNION | 15.8 | 17.2 | 8.9 |
| VANDERBURGH | 23.0 | 24.3 | 5.7 |
| VERMILLION | 18.9 | 18.8 | -0.5 |
| VIGO | 22.8 | 22.9 | 0.4 |
| WABASH | 15.1 | 17.1 | 13.2 |
| WARREN | 15.1 | 16.2 | 7.3 |
| WARRICK | 11.1 | 11.1 | 0.0 |
| WASHINGTON | 21.3 | 23.9 | 12.2 |
| WAYNE | 21.8 | 22.8 | 4.6 |
| WELLS | 7.6 | 9.4 | 23.7 |
| WHITE | 10.6 | 12.4 | 17.0 |
| WHITLEY | 7.0 | 9.9 | 41.4 |
| **INDIANA** | **18.6** | **21.5** | **15.6** |

## Table A.6a Abuse, Fiscal Year 1991

ABUSE & NEGLECT

| Counties | Total Reports of Abuse | Number of Substantiated & Indicated Cases | % of Reported Cases Substantiated & Indicated |
|---|---|---|---|
| ADAMS | 105 | 61 | 58.1 |
| ALLEN | 703 | 481 | 68.4 |
| BARTHOLOMEW | 321 | 115 | 35.8 |
| BENTON | 54 | 46 | 85.2 |
| BLACKFORD | 50 | 47 | 94.0 |
| BOONE | 127 | 104 | 81.9 |
| BROWN | 109 | 38 | 34.9 |
| CARROLL | 47 | 25 | 53.2 |
| CASS | 191 | 112 | 58.6 |
| CLARK | 445 | 326 | 73.3 |
| CLAY | 158 | 89 | 56.3 |
| CLINTON | 118 | 70 | 59.3 |
| CRAWFORD | 24 | 10 | 41.7 |
| DAVIESS | 117 | 65 | 55.6 |
| DEARBORN | 143 | 57 | 39.9 |
| DECATUR | 82 | 50 | 61.0 |
| DEKALB | 234 | 177 | 75.6 |
| DELAWARE | 761 | 400 | 52.6 |
| DUBOIS | 112 | 65 | 58.0 |
| ELKHART | 807 | 556 | 68.9 |
| FAYETTE | 237 | 152 | 64.1 |
| FLOYD | 327 | 148 | 45.3 |
| FOUNTAIN | 90 | 47 | 52.2 |
| FRANKLIN | 30 | 23 | 76.7 |
| FULTON | 74 | 47 | 63.5 |
| GIBSON | 117 | 70 | 59.8 |
| GRANT | 378 | 209 | 55.3 |
| GREENE | 218 | 103 | 47.2 |
| HAMILTON | 260 | 119 | 45.8 |
| HANCOCK | 268 | 146 | 54.5 |

## Table A.6a Cont'd

| Counties | Total Reports of Abuse | Number of Substantiated & Indicated Cases | % of Reported Cases Substantiated & Indicated |
|---|---|---|---|
| **ABUSE & NEGLECT** | | | |
| HARRISON | 124 | 54 | 43.5 |
| HENDRICKS | 309 | 206 | 66.7 |
| HENRY | 261 | 158 | 60.5 |
| HOWARD | 606 | 293 | 48.3 |
| HUNTINGTON | 215 | 71 | 33.0 |
| JACKSON | 249 | 109 | 43.8 |
| JASPER | 77 | 35 | 45.5 |
| JAY | 85 | 63 | 74.1 |
| JEFFERSON | 180 | 92 | 51.1 |
| JENNINGS | 154 | 88 | 57.1 |
| JOHNSON | 403 | 245 | 60.8 |
| KNOX | 176 | 75 | 42.6 |
| KOSCIUSKO | 286 | 187 | 65.4 |
| LAGRANGE | 112 | 69 | 61.6 |
| LAKE | 1,724 | 822 | 47.7 |
| LAPORTE | 471 | 258 | 54.8 |
| LAWRENCE | 165 | 90 | 54.5 |
| MADISON | 788 | 431 | 54.7 |
| MARION | 6,741 | 3,098 | 46.0 |
| MARSHALL | 321 | 184 | 57.3 |
| MARTIN | 77 | 45 | 58.4 |
| MIAMI | 103 | 73 | 70.9 |
| MONROE | 262 | 99 | 37.8 |
| MONTGOMERY | 211 | 94 | 44.5 |
| MORGAN | 433 | 247 | 57.0 |
| NEWTON | 72 | 33 | 45.8 |
| NOBLE | 170 | 101 | 59.4 |
| OHIO | 15 | 9 | 60.0 |
| ORANGE | 154 | 55 | 35.7 |
| OWEN | 164 | 87 | 53.0 |

**Table A.6a Cont'd**

| Counties | Total Reports of Abuse | Number of Substantiated & Indicated Cases | % of Reported Cases Substantiated & Indicated |
|---|---|---|---|
| ABUSE & NEGLECT | | | |
| PARKE | 57 | 39 | 68.4 |
| PERRY | 75 | 36 | 48.0 |
| PIKE | 43 | 20 | 46.5 |
| PORTER | 586 | 363 | 61.9 |
| POSEY | 89 | 35 | 39.3 |
| PULASKI | 33 | 20 | 60.6 |
| PUTNAM | 164 | 98 | 59.8 |
| RANDOLPH | 114 | 52 | 45.6 |
| RIPLEY | 100 | 51 | 51.0 |
| RUSH | 72 | 31 | 43.1 |
| ST. JOSEPH | 958 | 418 | 43.6 |
| SCOTT | 183 | 121 | 66.1 |
| SHELBY | 291 | 134 | 46.0 |
| SPENCER | 51 | 23 | 45.1 |
| STARKE | 65 | 45 | 69.2 |
| STEUBEN | 79 | 54 | 68.4 |
| SULLIVAN | 39 | 30 | 76.9 |
| SWITZERLAND | 8 | 4 | 50.0 |
| TIPPECANOE | 666 | 393 | 59.0 |
| TIPTON | 48 | 32 | 66.7 |
| UNION | 18 | 15 | 83.3 |
| VANDERBURGH | 953 | 549 | 57.6 |
| VERMILLION | 86 | 54 | 62.8 |
| VIGO | 408 | 169 | 41.4 |
| WABASH | 174 | 145 | 83.3 |
| WARREN | 56 | 38 | 67.9 |
| WARRICK | 158 | 69 | 43.7 |
| WASHINGTON | 61 | 42 | 68.9 |
| WAYNE | 443 | 281 | 63.4 |
| WELLS | 74 | 48 | 64.9 |
| WHITE | 117 | 68 | 58.1 |
| WHITLEY | 60 | 46 | 76.7 |
| **INDIANA** | **28,144** | **14,952** | **53.1** |

## Table A.6b Neglect, Fiscal Year, 1991

| Counties | Total Reports of Neglect | Number of Substantiated & Indicated Cases | % of Reported Cases Substantiated & Indicated |
|---|---|---|---|
| ABUSE & NEGLECT | | | |
| ADAMS | 105 | 73 | 69.5 |
| ALLEN | 923 | 623 | 67.5 |
| BARTHOLOMEW | 736 | 283 | 38.5 |
| BENTON | 65 | 57 | 87.7 |
| BLACKFORD | 88 | 81 | 92.0 |
| BOONE | 144 | 103 | 71.5 |
| BROWN | 128 | 52 | 40.6 |
| CARROLL | 54 | 39 | 72.2 |
| CASS | 288 | 138 | 47.9 |
| CLARK | 438 | 311 | 71.0 |
| CLAY | 233 | 122 | 52.4 |
| CLINTON | 96 | 62 | 64.6 |
| CRAWFORD | 30 | 23 | 76.7 |
| DAVIESS | 205 | 113 | 55.1 |
| DEARBORN | 187 | 48 | 25.7 |
| DECATUR | 76 | 56 | 73.7 |
| DEKALB | 188 | 135 | 71.8 |
| DELAWARE | 1,469 | 885 | 60.2 |
| DUBOIS | 164 | 123 | 75.0 |
| ELKHART | 709 | 482 | 68.0 |
| FAYETTE | 258 | 157 | 60.9 |
| FLOYD | 351 | 221 | 63.0 |
| FOUNTAIN | 83 | 60 | 72.3 |
| FRANKLIN | 32 | 26 | 81.3 |
| FULTON | 76 | 33 | 43.4 |
| GIBSON | 168 | 137 | 81.5 |
| GRANT | 446 | 148 | 33.2 |
| GREENE | 322 | 179 | 55.6 |
| HAMILTON | 119 | 32 | 26.9 |
| HANCOCK | 227 | 128 | 56.4 |

**Table A.6b Cont'd**

| Counties | Total Reports of Neglect | Number of Substantiated & Indicated Cases | % of Reported Cases Substantiated & Indicated |
|---|---|---|---|
| **ABUSE & NEGLECT** | | | |
| HARRISON | 133 | 58 | 43.6 |
| HENDRICKS | 311 | 179 | 57.6 |
| HENRY | 294 | 206 | 70.1 |
| HOWARD | 638 | 349 | 54.7 |
| HUNTINGTON | 180 | 62 | 34.4 |
| JACKSON | 389 | 213 | 54.8 |
| JASPER | 109 | 65 | 59.6 |
| JAY | 64 | 56 | 87.5 |
| JEFFERSON | 219 | 94 | 42.9 |
| JENNINGS | 264 | 171 | 64.8 |
| JOHNSON | 316 | 181 | 57.3 |
| KNOX | 481 | 158 | 32.8 |
| KOSCIUSKO | 316 | 175 | 55.4 |
| LAGRANGE | 88 | 45 | 51.1 |
| LAKE | 2,344 | 1,294 | 55.2 |
| LAPORTE | 548 | 267 | 48.7 |
| LAWRENCE | 111 | 51 | 45.9 |
| MADISON | 1,298 | 741 | 57.1 |
| MARION | 5,763 | 2,431 | 42.2 |
| MARSHALL | 374 | 204 | 54.5 |
| MARTIN | 139 | 88 | 63.3 |
| MIAMI | 107 | 74 | 69.2 |
| MONROE | 373 | 90 | 24.1 |
| MONTGOMERY | 266 | 130 | 48.9 |
| MORGAN | 499 | 208 | 41.7 |
| NEWTON | 66 | 28 | 42.4 |
| NOBLE | 208 | 108 | 51.9 |
| OHIO | 21 | 7 | 33.3 |
| ORANGE | 277 | 143 | 51.6 |
| OWEN | 150 | 49 | 32.7 |

Table A.6b Cont'd

| Counties | Total Reports of Neglect | Number of Substantiated & Indicated Cases | % of Reported Cases Substantiated & Indicated |
|---|---|---|---|
| **ABUSE & NEGLECT** | | | |
| PARKE | 86 | 52 | 60.5 |
| PERRY | 114 | 58 | 50.9 |
| PIKE | 61 | 31 | 50.8 |
| PORTER | 900 | 648 | 72.0 |
| POSEY | 81 | 17 | 21.0 |
| PULASKI | 9 | 6 | 66.7 |
| PUTNAM | 153 | 44 | 28.8 |
| RANDOLPH | 154 | 83 | 53.9 |
| RIPLEY | 180 | 94 | 52.2 |
| RUSH | 96 | 44 | 45.8 |
| ST. JOSEPH | 1,054 | 462 | 43.8 |
| SCOTT | 164 | 88 | 53.7 |
| SHELBY | 375 | 158 | 42.1 |
| SPENCER | 34 | 12 | 35.3 |
| STARKE | 129 | 97 | 75.2 |
| STEUBEN | 83 | 62 | 74.7 |
| SULLIVAN | 59 | 33 | 55.9 |
| SWITZERLAND | 25 | 8 | 32.0 |
| TIPPECANOE | 1,284 | 828 | 64.5 |
| TIPTON | 52 | 41 | 78.8 |
| UNION | 18 | 6 | 33.3 |
| VANDERBURGH | 1,145 | 642 | 56.1 |
| VERMILLION | 94 | 50 | 53.2 |
| VIGO | 657 | 274 | 41.7 |
| WABASH | 57 | 36 | 63.2 |
| WARREN | 54 | 43 | 79.6 |
| WARRICK | 165 | 67 | 40.6 |
| WASHINGTON | 74 | 59 | 79.7 |
| WAYNE | 564 | 324 | 57.4 |
| WELLS | 55 | 30 | 54.5 |
| WHITE | 111 | 50 | 45.0 |
| WHITLEY | 42 | 30 | 71.4 |
| INDIANA | 32,883 | 17,332 | 52.7 |

## Table A.7a Public School Enrollment and Dropout Rates
## School Year 1990-91

| Counties | Total Enrollment K-12 | Total Enrollment 7-12 | Dropout Rate/100 Students* | Dropout Rate 4 Grade Cohort** | % Retained in Grade |
|---|---|---|---|---|---|
| ADAMS | 5,229 | 2,446 | 2.25 | 11.48 | 0.98 |
| ALLEN | 48,033 | 21,035 | 3.06 | 15.95 | 1.85 |
| BARTHOLOMEW | 10,835 | 5,461 | 2.03 | 10.90 | 1.37 |
| BENTON | 2,128 | 1,019 | 1.67 | 9.85 | 2.47 |
| BLACKFORD | 2,505 | 1,147 | 3.23 | 17.57 | 1.02 |
| BOONE | 6,995 | 3,048 | 2.13 | 12.43 | 1.64 |
| BROWN | 2,334 | 1,104 | 4.17 | 22.71 | 1.51 |
| CARROLL | 2,850 | 1,326 | 3.02 | 15.82 | 1.22 |
| CASS | 7,572 | 3,476 | 5.03 | 27.08 | 1.87 |
| CLARK | 14,795 | 6,746 | 3.97 | 23.60 | 0.93 |
| CLAY | 4,467 | 2,006 | 3.29 | 18.23 | 1.50 |
| CLINTON | 6,359 | 2,770 | 4.30 | 19.75 | 1.51 |
| CRAWFORD | 1,847 | 863 | 2.67 | 13.36 | 2.24 |
| DAVIESS | 4,426 | 1,992 | 3.31 | 18.80 | 0.64 |
| DEARBORN | 7,932 | 3,620 | 2.98 | 15.03 | 1.90 |
| DECATUR | 4,644 | 2,244 | 3.83 | 20.21 | 1.29 |
| DEKALB | 7,244 | 3,236 | 3.71 | 20.02 | 0.88 |
| DELAWARE | 18,265 | 8,484 | 3.70 | 20.38 | 1.23 |
| DUBOIS | 6,646 | 2,901 | 1.90 | 10.99 | 0.88 |
| ELKHART | 27,422 | 11,651 | 3.77 | 21.20 | 1.18 |
| FAYETTE | 4,898 | 2,392 | 6.15 | 30.97 | 1.18 |
| FLOYD | 11,037 | 4,925 | 3.01 | 17.01 | 1.77 |
| FOUNTAIN | 3,367 | 1,521 | 1.84 | 9.54 | 0.96 |
| FRANKLIN | 3,034 | 1,517 | 6.79 | 34.94 | 0.53 |
| FULTON | 2,687 | 1,142 | 3.15 | 17.19 | 2.25 |
| GIBSON | 5,629 | 2,555 | 2.97 | 16.64 | 1.23 |
| GRANT | 12,365 | 5,557 | 2.23 | 12.65 | 1.57 |
| GREENE | 5,813 | 2,634 | 2.73 | 14.64 | 1.13 |
| HAMILTON | 21,347 | 9,216 | 1.78 | 10.40 | 0.90 |
| HANCOCK | 9,172 | 4,255 | 1.53 | 8.38 | 1.20 |

*Annual dropouts as a percentage of students in grades 7-12.

**Percentage of students who entered grade 9 who did not graduate in four years.

Table A.7a Cont'd

| Counties | Total Enrollment K-12 | Total Enrollment 7-12 | Dropout Rate/100 Students* | Dropout Rate 4 Grade Cohort** | % Retained in Grade |
|---|---|---|---|---|---|
| HARRISON | 5,652 | 2,478 | 1.90 | 10.95 | 0.95 |
| HENDRICKS | 14,433 | 6,569 | 1.75 | 10.14 | 0.95 |
| HENRY | 8,658 | 4,202 | 2.26 | 11.60 | 1.54 |
| HOWARD | 14,609 | 6,713 | 1.22 | 6.85 | 1.80 |
| HUNTINGTON | 6,726 | 2,940 | 5.03 | 26.00 | 0.21 |
| JACKSON | 6,588 | 3,211 | 2.62 | 14.15 | 2.94 |
| JASPER | 4,496 | 2,058 | 2.92 | 15.21 | 2.34 |
| JAY | 4,126 | 1,857 | 3.72 | 20.62 | 1.34 |
| JEFFERSON | 5,074 | 2,372 | 3.54 | 19.45 | 1.38 |
| JENNINGS | 4,224 | 1,924 | 4.05 | 21.35 | 2.44 |
| JOHNSON | 17,208 | 7,759 | 2.46 | 13.57 | 1.[illegible]9 |
| KNOX | 6,250 | 2,710 | 3.43 | 19.24 | 2.06 |
| KOSCIUSKO | 13,735 | 5,825 | 3.79 | 22.02 | 1.17 |
| LAGRANGE | 6,041 | 2,446 | 2.49 | 14.93 | 0.64 |
| LAKE | 90,125 | 41,615 | 2.66 | 14.80 | 3.17 |
| LAPORTE | 18,736 | 8,453 | 6.19 | 30.59 | 2.33 |
| LAWRENCE | 7,680 | 3,590 | 4.12 | 23.08 | 3.07 |
| MADISON | 21,824 | 10,278 | 4.08 | 21.17 | 2.14 |
| MARION | 120,152 | 49,048 | 5.08 | 27.72 | 2.83 |
| MARSHALL | 7,552 | 3,221 | 3.20 | 17.97 | 1.35 |
| MARTIN | 2,000 | 875 | 2.63 | 12.72 | 1.40 |
| MIAMI | 85,46 | 3,863 | 3.42 | 17.58 | 1.91 |
| MONROE | 12,904 | 5,633 | 3.80 | 19.30 | 0.94 |
| MONTGOMERY | 6,102 | 2,719 | 2.68 | 14.72 | 0.93 |
| MORGAN | 10,539 | 4,746 | 3.81 | 21.00 | 1.50 |
| NEWTON | 2,806 | 1,243 | 2.09 | 11.48 | 2.14 |
| NOBLE | 7,244 | 3,129 | 4.67 | 23.87 | 1.45 |
| OHIO | 995 | 448 | 1.34 | 8.41 | 1.34 |
| ORANGE | 3,459 | 1,559 | 4.36 | 22.70 | 1.41 |
| OWEN | 2,746 | 1,212 | 4.37 | 25.29 | 2.01 |

Table A.7a Cont'd

| Counties | Total Enrollment K-12 | Total Enrollment 7-12 | Dropout Rate/100 Students* | Dropout Rate 4 Grade Cohort** | % Retained in Grade |
|---|---|---|---|---|---|
| PARKE | 2,543 | 1,148 | 2.70 | 15.34 | 1.27 |
| PERRY | 3,654 | 1,642 | 1.64 | 9.30 | 0.80 |
| PIKE | 2,088 | 936 | 3.10 | 15.28 | 2.32 |
| PORTER | 24,579 | 11,341 | 2.01 | 11.61 | 0.73 |
| POSEY | 4,650 | 2,066 | 2.03 | 12.08 | 0.96 |
| PULASKI | 2,554 | 1,123 | 3.38 | 18.69 | 0.97 |
| PUTNAM | 5,724 | 2,566 | 3.23 | 17.35 | 1.88 |
| RANDOLPH | 5,240 | 2,503 | 3.20 | 17.16 | 1.41 |
| RIPLEY | 5,013 | 2,248 | 2.76 | 13.42 | 0.73 |
| RUSH | 2,925 | 1,389 | 4.10 | 21.86 | 1.77 |
| ST. JOSEPH | 37,591 | 16,380 | 4.67 | 25.28 | 2.79 |
| SCOTT | 4,079 | 1,905 | 3.31 | 18.18 | 2.17 |
| SHELBY | 7,686 | 3,483 | 2.47 | 13.22 | 1.04 |
| SPENCER | 3,642 | 1,672 | 1.67 | 9.02 | 0.81 |
| STARKE | 4,304 | 1,922 | 3.90 | 20.76 | 1.86 |
| STEUBEN | 4,470 | 1,920 | 2.92 | 16.32 | 0.74 |
| SULLIVAN | 3,676 | 1,701 | 1.88 | 11.66 | 0.93 |
| SWITZERLAND | 1,457 | 624 | 4.33 | 23.39 | 1.92 |
| TIPPECANOE | 16,990 | 7,329 | 2.39 | 13.87 | 1.12 |
| TIPTON | 3,121 | 1,437 | 2.57 | 14.49 | 0.61 |
| UNION | 1,511 | 689 | 3.48 | 18.38 | 1.32 |
| VANDERBURGH | 22,918 | 9,653 | 4.81 | 25.04 | 1.34 |
| VERMILLION | 3,039 | 1,432 | 3.49 | 19.03 | 1.29 |
| VIGO | 16,982 | 7468 | 4.38 | 23.83 | 0.73 |
| WABASH | 6,643 | 3,089 | 3.37 | 18.76 | 1.06 |
| WARREN | 1,287 | 612 | 1.14 | 7.27 | 1.48 |
| WARRICK | 8,898 | 4,211 | 3.42 | 19.13 | 0.92 |
| WASHINGTON | 4,642 | 2,064 | 3.54 | 17.66 | 1.64 |
| WAYNE | 12,655 | 5,621 | 4.43 | 23.54 | 1.12 |
| WELLS | 5,224 | 2,259 | 1.99 | 11.95 | 1.37 |
| WHITE | 5,399 | 2,432 | 2.22 | 13.34 | 0.64 |
| WHITLEY | 4,881 | 2,229 | 2.65 | 15.00 | 0.40 |
| **INDIANA** | **953,152** | **424,078** | **3.44** | **18.89** | **1.78** |

## Table A.7b Post-graduation Plans of Students in Grade 12, 1988-89

| Counties | % Planning on 4 Year Institution | % Planning Some Higher Education | % Planning on Military |
|---|---|---|---|
| ADAMS | 40.70 | 55.80 | 1.31 |
| ALLEN | 47.56 | 61.50 | 4.59 |
| BARTHOLOMEW | 47.67 | 66.91 | 2.85 |
| BENTON | 41.46 | 60.37 | 1.22 |
| BLACKFORD | 34.33 | 55.72 | 7.96 |
| BOONE | 54.29 | 70.00 | 4.90 |
| BROWN | 16.03 | 25.19 | 5.34 |
| CARROLL | 37.11 | 66.49 | 7.73 |
| CASS | 34.51 | 46.38 | 5.19 |
| CLARK | 38.81 | 56.75 | 9.25 |
| CLAY | 36.20 | 56.99 | 2.15 |
| CLINTON | 43.84 | 64.66 | 2.47 |
| CRAWFORD | 31.68 | 44.55 | 4.95 |
| DAVIESS | 37.64 | 61.25 | 2.95 |
| DEARBORN | 40.41 | 56.37 | 5.77 |
| DECATUR | 37.83 | 51.03 | 5.57 |
| DEKALB | 35.35 | 51.68 | 1.57 |
| DELAWARE | 40.18 | 51.79 | 2.47 |
| DUBOIS | 44.35 | 63.60 | 5.44 |
| ELKHART | 43.97 | 58.16 | 3.46 |
| FAYETTE | 32.87 | 53.50 | 7.69 |
| FLOYD | 47.18 | 53.23 | 4.97 |
| FOUNTAIN | 34.55 | 59.27 | 5.82 |
| FRANKLIN | 26.84 | 45.02 | 8.66 |
| FULTON | 38.69 | 50.75 | 5.03 |
| GIBSON | 37.64 | 67.12 | 2.04 |
| GRANT | 29.03 | 40.11 | 10.06 |
| GREENE | 30.83 | 54.15 | 3.89 |
| HAMILTON | 66.39 | 76.29 | 3.09 |
| HANCOCK | 51.34 | 68.32 | 4.53 |

Table A.7b Cont'd

| Counties | % Planning on 4 Year Institution | % Planning Some Higher Education | % Planning on Military |
|---|---|---|---|
| HARRISON | 34.43 | 47.90 | 7.19 |
| HENDRICKS | 50.99 | 70.98 | 4.34 |
| HENRY | 36.34 | 50.62 | 8.07 |
| HOWARD | 44.22 | 62.29 | 5.69 |
| HUNTINGTON | 32.62 | 47.42 | 3.86 |
| JACKSON | 38.07 | 51.03 | 5.35 |
| JASPER | 49.67 | 71.19 | 7.28 |
| JAY | 28.24 | 49.17 | 4.98 |
| JEFFERSON | 42.82 | 61.00 | 5.28 |
| JENNINGS | 35.24 | 55.12 | 8.43 |
| JOHNSON | 46.31 | 64.77 | 3.77 |
| KNOX | 15.57 | 63.21 | 3.77 |
| KOSCIUSKO | 41.76 | 56.94 | 5.53 |
| LAGRANGE | 36.28 | 57.73 | 5.05 |
| LAKE | 44.81 | 63.04 | 6.96 |
| LAPORTE | 39.77 | 60.68 | 5.36 |
| LAWRENCE | 29.31 | 42.77 | 4.75 |
| MADISON | 46.45 | 66.09 | 6.33 |
| MARION | 47.49 | 60.78 | 4.31 |
| MARSHALL | 42.04 | 68.96 | 3.73 |
| MARTIN | 30.34 | 60.00 | 7.59 |
| MIAMI | 42.06 | 56.30 | 6.55 |
| MONROE | 49.43 | 62.70 | 2.83 |
| MONTGOMERY | 41.72 | 59.86 | 4.76 |
| MORGAN | 43.25 | 53.75 | 4.50 |
| NEWTON | 35.00 | 56.50 | 6.50 |
| NOBLE | 36.18 | 54.38 | 4.49 |
| OHIO | 24.19 | 45.16 | 6.45 |
| ORANGE | 32.34 | 46.81 | 2.55 |
| OWEN | 21.51 | 46.51 | 6.98 |

**Table A.7b Cont'd**

| Counties | % Planning on 4 Year Institution | % Planning Some Higher Education | % Planning on Military |
|---|---|---|---|
| **EDUCATION** | | | |
| PARKE | 32.70 | 47.87 | 7.11 |
| PERRY | 37.39 | 55.86 | 5.41 |
| PIKE | 25.17 | 51.02 | 5.44 |
| PORTER | 51.79 | 61.90 | 4.53 |
| POSEY | 47.46 | 62.69 | 4.18 |
| PULASKI | 42.86 | 56.00 | 4.00 |
| PUTNAM | 38.97 | 49.75 | 3.68 |
| RANDOLPH | 31.98 | 54.65 | 10.50 |
| RIPLEY | 45.43 | 62.78 | 6.94 |
| RUSH | 28.32 | 42.48 | 5.31 |
| ST. JOSEPH | 42.19 | 61.16 | 3.13 |
| SCOTT | 31.03 | 40.95 | 5.60 |
| SHELBY | 38.00 | 54.40 | 4.80 |
| SPENCER | 35.62 | 55.23 | 4.58 |
| STARKE | 30.00 | 42.40 | 5.20 |
| STEUBEN | 43.31 | 60.51 | 4.78 |
| SULLIVAN | 34.33 | 50.00 | 4.10 |
| SWITZERLAND | 15.19 | 26.58 | 11.39 |
| TIPPECANOE | 53.39 | 67.14 | 6.16 |
| TIPTON | 67.63 | 88.38 | 6.22 |
| UNION | 35.09 | 53.51 | 4.39 |
| VANDERBURGH | 43.76 | 60.49 | 6.17 |
| VERMILLION | 32.79 | 51.42 | 9.31 |
| VIGO | 51.72 | 74.35 | 6.54 |
| WABASH | 39.18 | 50.43 | 3.25 |
| WARREN | 46.67 | 61.67 | 5.83 |
| WARRICK | 56.68 | 69.46 | 3.23 |
| WASHINGTON | 29.66 | 41.72 | 6.55 |
| WAYNE | 47.35 | 64.94 | 7.59 |
| WELLS | 38.31 | 55.21 | 2.54 |
| WHITE | 38.40 | 63.34 | 4.49 |
| WHITLEY | 32.64 | 50.91 | 3.66 |
| INDIANA | 43.41 | 59.87 | 5.08 |

## Table A.7c Educational Attainment of Persons Age 25 and Older, 1990

| Counties | High School Graduate or Higher (%) | Bachelor's Degree or Higher (%) |
|---|---|---|
| ADAMS | 74.4 | 10.7 |
| ALLEN | 81.2 | 19.0 |
| BARTHOLOMEW | 76.9 | 16.9 |
| BENTON | 77.1 | 9.2 |
| BLACKFORD | 73.0 | 8.9 |
| BOONE | 82.5 | 22.2 |
| BROWN | 76.4 | 15.2 |
| CARROLL | 76.2 | 10.0 |
| CASS | 75.9 | 9.0 |
| CLARK | 72.8 | 11.2 |
| CLAY | 75.9 | 9.8 |
| CLINTON | 76.2 | 11.0 |
| CRAWFORD | 59.6 | 5.7 |
| DAVIESS | 66.2 | 7.6 |
| DEARBORN | 73.5 | 10.7 |
| DECATUR | 72.3 | 9.7 |
| DEKALB | 77.5 | 9.9 |
| DELAWARE | 74.5 | 16.5 |
| DUBOIS | 72.2 | 10.9 |
| ELKHART | 72.8 | 14.2 |
| FAYETTE | 63.9 | 8.1 |
| FLOYD | 73.2 | 15.1 |
| FOUNTAIN | 73.0 | 7.6 |
| FRANKLIN | 65.3 | 8.2 |
| FULTON | 75.3 | 9.4 |
| GIBSON | 72.8 | 9.1 |
| GRANT | 71.8 | 11.2 |
| GREENE | 71.6 | 9.9 |
| HAMILTON | 88.7 | 36.2 |
| HANCOCK | 80.1 | 14.9 |

## Table A.7c Cont'd

| Counties | High School Graduate or Higher (%) | Bachelor's Degree or Higher (%) |
|---|---|---|
| **EDUCATION** | | |
| HARRISON | 71.1 | 8.4 |
| HENDRICKS | 84.1 | 18.2 |
| HENRY | 71.4 | 9.2 |
| HOWARD | 78.5 | 14.3 |
| HUNTINGTON | 78.6 | 11.8 |
| JACKSON | 69.3 | 8.7 |
| JASPER | 75.5 | 10.8 |
| JAY | 68.9 | 8.2 |
| JEFFERSON | 70.3 | 13.3 |
| JENNINGS | 64.1 | 6.5 |
| JOHNSON | 80.4 | 16.7 |
| KNOX | 74.5 | 11.1 |
| KOSCIUSKO | 77.5 | 14.4 |
| LAGRANGE | 56.7 | 7.3 |
| LAKE | 73.5 | 12.8 |
| LAPORTE | 73.9 | 11.7 |
| LAWRENCE | 69.7 | 9.4 |
| MADISON | 73.5 | 11.7 |
| MARION | 76.8 | 21.4 |
| MARSHALL | 74.0 | 12.3 |
| MARTIN | 64.4 | 8.6 |
| MIAMI | 76.4 | 9.7 |
| MONROE | 82.1 | 32.9 |
| MONTGOMERY | 80.0 | 12.8 |
| MORGAN | 73.6 | 10.0 |
| NEWTON | 72.4 | 8.1 |
| NOBLE | 72.1 | 8.0 |
| OHIO | 67.7 | 6.0 |
| ORANGE | 64.9 | 6.0 |
| OWEN | 66.3 | 7.1 |

Table A.7c Cont'd

| Counties | High School Graduate or Higher (%) | Bachelor's Degree or Higher (%) |
|---|---|---|
| **EDUCATION** | | |
| PARKE | 76.7 | 10.1 |
| PERRY | 65.4 | 6.8 |
| PIKE | 65.5 | 8.5 |
| PORTER | 82.4 | 18.5 |
| POSEY | 76.3 | 11.0 |
| PULASKI | 71.9 | 8.9 |
| PUTNAM | 76.1 | 11.3 |
| RANDLOPH | 71.9 | 8.6 |
| RIPLEY | 68.8 | 9.8 |
| RUSH | 73.6 | 8.7 |
| ST. JOSEPH | 76.1 | 19.2 |
| SCOTT | 60.0 | 6.6 |
| SHELBY | 74.1 | 9.9 |
| SPENCER | 71.9 | 9.2 |
| STARKE | 59.9 | 6.0 |
| STEUBEN | 79.0 | 12.5 |
| SULLIVAN | 74.1 | 10.0 |
| SWITZERLAND | 65.8 | 5.6 |
| TIPPECANOE | 85.2 | 30.7 |
| TIPTON | 77.0 | 9.8 |
| UNION | 71.3 | 8.4 |
| VANDERBURGH | 75.2 | 16.0 |
| VERMILLION | 72.1 | 7.8 |
| VIGO | 76.0 | 18.1 |
| WABASH | 74.4 | 11.7 |
| WARREN | 71.6 | 9.4 |
| WARRICK | 80.1 | 16.2 |
| WASHINGTON | 66.2 | 6.8 |
| WAYNE | 71.2 | 11.3 |
| WELLS | 79.0 | 12.1 |
| WHITE | 77.9 | 10.7 |
| WHITLEY | 78.9 | 8.8 |
| **INDIANA** | **75.6** | **15.6** |

## Table A.8 Birth Data, 1989

| Counties | Total Live Births | Live Births to Women < 15 Yrs. | Live Births to Women 15-19 Yrs. | Low Birth Weight Infants (per 1000)* | Infant Mortality Rate (per 1000) |
|---|---|---|---|---|---|
| ADAMS | 599 | 0 | 57 | 48.4 | 13.4 |
| ALLEN | 5,088 | 17 | 611 | 71.7 | 11.6 |
| BARTHOLOMEW | 923 | 3 | 154 | 65.0 | 15.2 |
| BENTON | 158 | 0 | 14 | 44.3 | 6.3 |
| BLACKFORD | 180 | 1 | 29 | 83.3 | 0.0 |
| BOONE | 601 | 1 | 58 | 59.9 | 11.6 |
| BROWN | 168 | 0 | 22 | 53.6 | 6.0 |
| CARROLL | 280 | 1 | 38 | 42.9 | 7.1 |
| CASS | 581 | 1 | 87 | 65.4 | 13.8 |
| CLARK | 1,137 | 1 | 183 | 73.9 | 13.2 |
| CLAY | 325 | 0 | 56 | 40.0 | 3.1 |
| CLINTON | 478 | 1 | 80 | 52.3 | 10.5 |
| CRAWFORD | 158 | 0 | 24 | 63.3 | 6.3 |
| DAVIESS | 444 | 1 | 55 | 51.8 | 2.3 |
| DEARBORN | 576 | 0 | 77 | 69.4 | 5.2 |
| DECATUR | 325 | 2 | 48 | 49.2 | 18.5 |
| DEKALB | 529 | 0 | 68 | 60.5 | 7.6 |
| DELAWARE | 1,520 | 2 | 272 | 55.9 | 7.9 |
| DUBOIS | 585 | 1 | 32 | 41.0 | 3.4 |
| ELKHART | 2,761 | 6 | 385 | 60.8 | 13.0 |
| FAYETTE | 339 | 0 | 88 | 70.8 | 17.7 |
| FLOYD | 955 | 3 | 153 | 64.9 | 7.3 |
| FOUNTAIN | 229 | 0 | 36 | 52.4 | 8.7 |
| FRANKLIN | 267 | 2 | 39 | 52.4 | 11.2 |
| FULTON | 269 | 0 | 40 | 52.0 | 7.4 |
| GIBSON | 430 | 1 | 47 | 58.1 | 9.3 |
| GRANT | 1,004 | 5 | 218 | 73.7 | 11.0 |
| GREENE | 383 | 0 | 57 | 65.3 | 13.1 |
| HAMILTON | 1,534 | 2 | 91 | 48.2 | 8.5 |
| HANCOCK | 631 | 0 | 63 | 46.0 | 3.2 |

*Infants born at a weight of under 2500 grams.

Table A.8 Cont'd

| Counties | Total Live Births | Live Births to Women < 15 Yrs. | Live Births to Women 15-19 Yrs. | Low Birth Weight Infants (per 1000)* | Infant Mortality Rate (per 1000) |
|---|---|---|---|---|---|
| HARRISON | 382 | 2 | 50 | 78.5 | 5.2 |
| HENDRICKS | 988 | 1 | 75 | 44.5 | 9.1 |
| HENRY | 633 | 0 | 82 | 42.7 | 3.2 |
| HOWARD | 1,184 | 3 | 193 | 65.0 | 11.0 |
| HUNTINGTON | 524 | 1 | 69 | 57.3 | 7.6 |
| JACKSON | 498 | 1 | 89 | 52.2 | 8.0 |
| JASPER | 342 | 0 | 48 | 61.4 | 8.8 |
| JAY | 317 | 0 | 58 | 59.9 | 6.3 |
| JEFFERSON | 397 | 1 | 66 | 45.3 | 2.5 |
| JENNINGS | 278 | 1 | 32 | 89.9 | 10.8 |
| JOHNSON | 1,227 | 0 | 142 | 50.5 | 9.8 |
| KNOX | 482 | 2 | 82 | 33.2 | 8.3 |
| KOSCIUSKO | 1,137 | 1 | 143 | 38.7 | 8.8 |
| LAGRANGE | 641 | 0 | 67 | 39.0 | 9.4 |
| LAKE | 7,183 | 33 | 1,077 | 85.3 | 12.9 |
| LAPORTE | 1,509 | 4 | 232 | 76.2 | 7.3 |
| LAWRENCE | 564 | 1 | 91 | 60.3 | 7.1 |
| MADISON | 1,733 | 8 | 312 | 69.8 | 9.2 |
| MARION | 14,578 | 59 | 2,351 | 85.5 | 12.1 |
| MARSHALL | 628 | 1 | 65 | 55.7 | 9.6 |
| MARTIN | 143 | 1 | 28 | 42.0 | 0.0 |
| MIAMI | 654 | 2 | 89 | 41.3 | 6.1 |
| MONROE | 1,227 | 1 | 128 | 64.4 | 7.3 |
| MONTGOMERY | 506 | 1 | 59 | 69.2 | 7.9 |
| MORGAN | 803 | 1 | 126 | 64.8 | 17.4 |
| NEWTON | 192 | 1 | 28 | 46.9 | 20.8 |
| NOBLE | 620 | 0 | 72 | 66.1 | 11.3 |
| OHIO | 74 | 0 | 10 | 27.0 | 13.5 |
| ORANGE | 233 | 0 | 30 | 25.8 | 12.9 |
| OWEN | 235 | 1 | 38 | 42.6 | 0.0 |

Table A.8 Cont'd

| Counties | Total Live Births | Live Births to Women < 15 Yrs. | Live Births to Women 15-19 Yrs. | Low Birth Weight Infants (per 1000)* | Infant Mortality Rate (per 1000) |
|---|---|---|---|---|---|
| PARKE | 191 | 0 | 25 | 47.1 | 5.2 |
| PERRY | 242 | 0 | 31 | 62.0 | 16.5 |
| PIKE | 155 | 0 | 19 | 51.6 | 6.5 |
| PORTER | 1,552 | 1 | 168 | 49.0 | 5.8 |
| POSEY | 371 | 0 | 35 | 43.1 | 10.8 |
| PULASKI | 189 | 1 | 26 | 37.0 | 5.3 |
| PUTNAM | 385 | 1 | 57 | 62.3 | 10.4 |
| RANDOLPH | 362 | 2 | 49 | 52.5 | 13.8 |
| RIPLEY | 395 | 0 | 50 | 32.9 | 7.6 |
| RUSH | 267 | 0 | 40 | 78.7 | 7.5 |
| ST. JOSEPH | 3,895 | 7 | 555 | 71.1 | 8.5 |
| SCOTT | 345 | 0 | 67 | 101.4 | 14.5 |
| SHELBY | 531 | 0 | 72 | 62.1 | 5.6 |
| SPENCER | 266 | 1 | 27 | 97.7 | 18.8 |
| STARKE | 310 | 0 | 62 | 41.9 | 9.7 |
| STEUBEN | 417 | 0 | 62 | 74.3 | 9.6 |
| SULLIVAN | 256 | 0 | 40 | 74.2 | 3.9 |
| SWITZERLAND | 82 | 0 | 13 | 48.8 | 0.0 |
| TIPPECANOE | 1,871 | 0 | 188 | 49.7 | 9.1 |
| TIPTON | 210 | 0 | 36 | 76.2 | 4.8 |
| UNION | 82 | 0 | 12 | 122.0 | 0.0 |
| VANDERBURGH | 2,352 | 3 | 298 | 60.8 | 10.6 |
| VERMILLION | 170 | 0 | 31 | 64.7 | 11.8 |
| VIGO | 1,368 | 6 | 221 | 55.6 | 10.2 |
| WABASH | 471 | 3 | 64 | 55.2 | 12.7 |
| WARREN | 85 | 0 | 12 | 82.4 | 23.5 |
| WARRICK | 583 | 2 | 68 | 41.2 | 13.7 |
| WASHINGTON | 284 | 0 | 46 | 70.4 | 7.0 |
| WAYNE | 991 | 4 | 167 | 60.5 | 6.1 |
| WELLS | 408 | 0 | 32 | 63.7 | 7.4 |
| WHITE | 351 | 1 | 45 | 28.5 | 8.5 |
| WHITLEY | 395 | 0 | 48 | 60.8 | 0.0 |
| **INDIANA** | **83,201** | **210** | **11,780** | **66.5** | **10.2** |

# 10 Blueprints for Healthy Development

The Indiana Youth Institute's blueprint for healthy development of all Indiana's children is based on the premise that every child in Indiana—regardless of race, gender, ethnicity, physically or mentally challenging condition, geographical location or economic status—deserves an equal opportunity to grow up in a safe, healthy, and nurturing environment.

## Building a Healthy Body

Indiana's youth will be born at full term and normal birth weight to healthy mothers. They will receive a well-balanced diet in adequate supply to grow strong bodies to acceptable height for their age. They will be provided a balance of physical activity and rest in a safe and caring environment. They and their families will have access to good medical care and educational opportunities that will teach them how to abstain from health-endangering activities and to engage in health-enhancing activities.

## Building Positive Relationships

Indiana's children will experience love and care of parents and other significant adults. They will develop wholesome relationships while learning to work collaboratively with peers and adults.

## Building Self-Acceptance

Indiana's children and youth will perceive themselves as lovable and capable; they will act with self-confidence, self-reliance, self-direction, and control. They will take pride in their accomplishments. As they develop self-esteem, they will have positive feelings about their own uniqueness as well as that of others.

## Building Active Minds

Indiana's young people will have stimulating and nurturing environments that build on their individual experiences and expand their knowledge. Each young person will reach his or her own potential, gaining literacy and numeric skills that empower the lifelong process of asking questions, collecting and analyzing information, and formulating valid conclusions.

## Building Spirit and Character

Indiana's young people will grow up learning to articulate values upon which to make ethical decisions and promote the common good. Within safe boundaries, children and youth will test limits and understand relationships between actions and consequences

## Building Creativity and Joy

Indiana's young people will have diverse opportunities to develop their talents in creative expression (e.g., music, dance, literature, visual arts, theater); to appreciate the creative talents of others; and to participate in recreational activities that inspire constructive, lifelong satisfaction.

## Building a Caring Community

Indiana's communities will encourage their young people to see themselves as valued participants in community life. In addition to being recipients of services that express the communities' concerns for their safety and well-being, young citizens will become resources who will improve their surroundings, support the well-being of others, and participate in decisions that affect community life.

## Building a Global Perspective

Indiana's children and youth will learn to see themselves as part of the global community, beyond ethnic, religious, racial, state, and national boundaries. In formal and nonformal educational experiences, they will have opportunities to become familiar with the history, political issues, languages, cultures, and ecosystems that affect global life and future well-being.

## Building Economic Independence

Indiana's young people will be exposed to a variety of educational and employment experiences that will contribute to vocational and career options. Their formal and nonformal educational experiences will prepare them to make the transition from school to work, to contribute to the labor force, and to participate in an economic environment that will grow increasingly more complex and will require lifelong learning.

## Building a Humane Environment

All children will have access to a physically safe environment, free from abuse, neglect, exploitation, and other forms of violence. They will have adequate housing and living conditions; safe neighborhoods; clean air, food, and water. Their environment will be free from toxins, drugs, alcohol, and tobacco. All children will have an opportunity to learn how to protect their environment for the future.

Indiana Youth Institute • 333 N. Alabama • Suite 200 • Indianapolis • Indiana • (317) 634-4222 • (800) 343-7060

**The Indiana Youth Institute**

Working with adults
who care about youth

Indiana Youth Institute
333 N. Alabama, Suite 200
Indianapolis, IN 46204
(317) 634-4222
(800) 343-7060 in Indiana
Fax (317) 685-2264

*The Indiana Youth Institute was established in 1988 as an independent, nonprofit center. IYI is an intermediary agency serving the youth of Indiana by supporting adults who care about youth. It provides youth-serving adults and policymakers with research, training and advocacy. This publication is made possible in part by the support of Lilly Endowment Inc., Lincoln National Corporation, Citizens Bank of Evansville, INB National Bank, Indianapolis, and PSI Energy through PSI Foundation.*